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Division Waste Management

Section Superfund

Program IHS (IHS)

DocCat Facility



North Carolina Department of Environment and Natural Resources

Division of Waste Management

Beverly Eaves Perdue
Governor

Dexter R. Matthews
Director

Dee Freeman
Secretary

April 7, 2010

Ms Susan Holder
Sampson County Interim Manager
435 Rowan Rd
Clinton, NC 28328

Subject: Pre-Regulatory Landfill Sites in Sampson County

Dear Ms Holder:

The General Assembly of North Carolina enacted Senate Bill 1492 which created a program to assess the public health and environmental hazards at landfill and dump sites that operated prior to 1983 and to develop and implement remedial action plans at sites requiring remediation. The Pre-Regulatory Landfill Unit (Unit) was created in the Inactive Hazardous Sites Branch (IHSB) to oversee these activities. The purpose of this letter is to make you aware of the sites identified in your county and to provide general guidance of relevant state statutes.

Based on the information obtained by the Unit, the sites listed below tentatively qualify under Senate Bill 1492. The approximate locations are shown in the attached map.

<u>ID Number</u>	<u>Site Name</u>	<u>Site Address</u>
NCD981031693	Keener Landfill	10 Tangelwood Lane
NCN000407196	Rowan Rd Dump	Rowan Road
NONCD0000351	Dunn Refuse Disposal	US Hwy 421
NONCD0000557	Salemburg Dump	Bubba Gump Lane
NONCD0000558	Clinton Dump	Royal Lane
NONCD0000560	Autryville LDFL	SR 1233
NONCD0000561	Roseboro Dump	NC 242
NONCD0000562	Garland Dump	SR 1133
NONCD0000700	Sampson Co LDFL (Spiveys Corner)	Hudsontown Road (SR 1634)
NONCD0000701	Sampson Co LDFL (Mt Gilead)	US 421
NONCD0000702	Sampson Co LDFL (Ingold)	Ezzell Road (SR 1142)
NONCD0000703	Sampson Co LDFL (Ivanhoe)	Ivanhoe Road (SR 1100)
NONCD0000704	Sampson Co LDFL (Suttontown)	Preacher Henry Road (SR 1730)
NONCD0000706	Sampson Co LDFL (Carters Bridge)	SR 1134

Work at these sites may be performed using the Unit's resources or through local government actions. The Unit has prioritized the sites statewide based on their threat to public health and the environment and will perform assessments and implement remedial actions based on this priority. Local governments may opt to perform the work at any time under the guidance of the Unit. Reimbursement of local government costs may be available for assessments and remedial actions to abate an imminent hazard as funds are available. The conditions for reimbursement include approval of the assessment and remediation plan by the Unit and certified accounting of costs. A document, *IHSB Guidelines for Addressing Old Landfills & Dumps*, was developed to assist local governments and the Unit in this work. It is available on our web site, <http://portal.ncdenr.org/web/wm/sf/ihb/ihs/ihsguide>.

An additional purpose in notifying you of these sites is to provide information to assist in your responsibilities in the permitting of private drinking water wells. The General Assembly enacted legislation which required local health departments to implement programs for the permitting, inspecting, and testing of private drinking water wells by July 1, 2008. State well construction standards in 15A NCAC 2C require a minimum horizontal separation of 500 feet between a water supply well and a landfill or disposal site. More precise location information for the sites in your county may be requested from the Unit.

If you are aware of additional sites, have additional information on the identified sites, or need further information, please contact me at (919) 508-8473.

Sincerely,

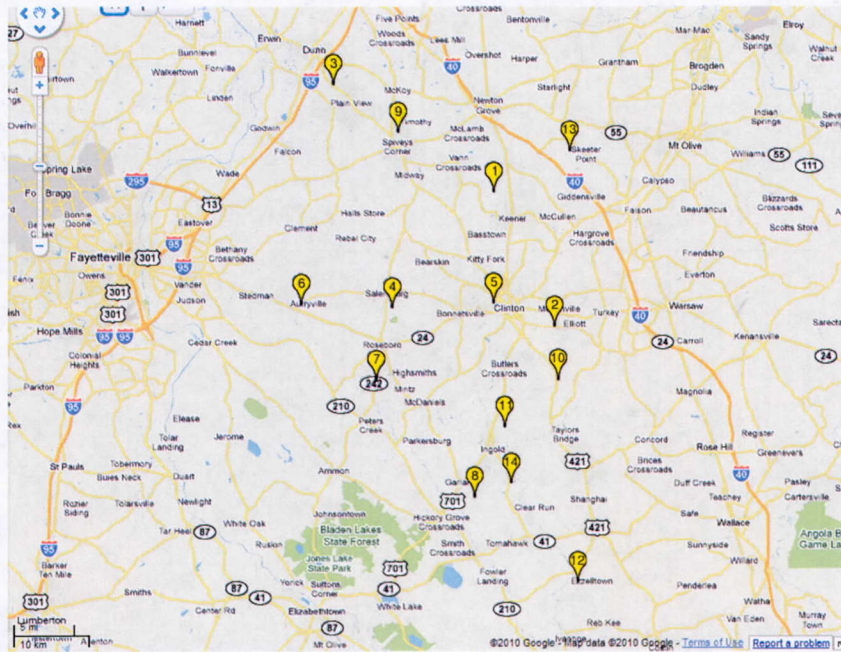


Patricia M. Backus, P.E.
Pre-Regulatory Landfill Unit
Inactive Hazardous Sites Branch
Superfund Section

cc: Ms Teresa Underwood
Environmental Health Director
Sampson County

Sampson County

Pre-Regulatory Landfill Sites



	Site ID	Site Name	State Plane (NAD 83)		Decimal Coordinates	
			X	Y	Latitude	Longitude
1	NCD981031693	Keener Landfill	668915	154267	35.13892	-78.349069
2	NCN000407196	Rowan Rd Dump	677151	136104	34.97467	-78.260173
3	NONCD0000351	Dunn Refuse Disposal	647435	168725	35.27029	-78.58413
4	NONCD0000557	Salemburg Dump	655526	138437	34.99692	-78.496883
5	NONCD0000558	Clinton Dump	669074	139181	35.00291	-78.348411
6	NONCD0000560	Autryville Ldfl	643297	138924	35.00179	-78.630833
7	NONCD0000561	Roseboro Dump	653361	128597	34.90831	-78.52112
8	NONCD0000562	Garland Dump	666726	113083	34.76778	-78.375933
9	NONCD0000700	Sampson Co Ldfl (Spiveys Corner)	656110	162356	35.21251	-78.489136
10	NONCD0000701	Sampson Co Ldfl (Mt Gilead)	677729	128922	34.90988	-78.254434
11	NONCD0000702	Sampson Co Ldfl (Ingold)	670577	122643	34.85374	-78.333162
12	NONCD0000703	Sampson Co Ldfl (Ivanhoe)	680582	101580	34.66321	-78.225547
13	NONCD0000704	Sampson Co Ldfl (Suttontown)	679062	159996	35.18991	-78.237234
14	NONCD0000706	Sampson Co Ldfl (Carters Bridge)	671616	114979	34.78459	-78.322372



North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director

Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary

February 26, 2007

<SAL> <FIRST> <LAST>, County Manager
County of <MUNICIPALITY>
<ADDRESS>
<TOWN>, North Carolina <ZIP>

Subject: Assessment, Cleanup, and Redevelopment of Old Landfill Sites Within Your Jurisdiction

Dear <SAL> <LAST>:

Governor Easley released his proposed budget February 22, 2007. Included in the budget is a specific item I believe should be of interest to you from a fiscal, environmental and public health protection perspective.

There are approximately 700 old landfills statewide and <LANDFILL#> old landfills in your local area that closed before the State permitting system became effective. These landfills are listed on the Old Landfill Sites portion of the Inactive Hazardous Sites Inventory maintained by the Superfund Section, Division of Waste Management. Any person, including local governments, that arranged for disposal or disposed of waste in the landfills may be held liable for the cleanup of the site. I have attached a report that identifies the location of known old landfill sites in <COUNTY NAME> County that may have closed prior to 1983 and thus qualify for the program described in this letter.

The Division has surveyed old landfills in 47 counties. The results of the survey indicate reason for concern about potential public health and safety impacts of these sites if they are not addressed. Seventy percent of the sites surveyed had a school, church, residence, day care or drinking water source within 1000 feet. The Division has found 102 old landfills that have a drinking water well within 500 feet. Thirteen of the landfills surveyed have residences built over the old landfill. The cost of assessment and cleanup of these old landfill sites can be as high as several million dollars.

Governor Easley's budget establishes a partnership between the State and local governments to both clean up the old landfill sites and provide funding for redevelopment of the sites. Many are in prime locations for redevelopment opportunities. The Governor's budget proposes to pay for cleanup and redevelopment of these sites through a surcharge on disposal of solid waste. The funding mechanism is a fair one. It is based on the idea that those who use solid waste disposal facilities should share responsibility for cleanup of sites used for solid waste disposal in the past that may have been lawful at the time, but did not meet standards that we now know are necessary to protect public health and safety.

The proposed \$2.00 per ton disposal surcharge would apply to residential, commercial, industrial, and construction and demolition debris type waste that is either disposed at a landfill or passes through a transfer station for disposal out-of-state. The State would use revenue from the surcharge to contract for cleanup of the old landfill sites and to provide grants to local government for redevelopment. The funds could also be used across the state to clean up other hazardous substance disposal sites that have no viable responsible party.

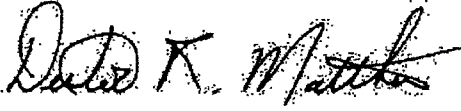
The only tool currently available to the State to ensure cleanup when it is needed is an enforcement action against those who owned, operated, or contributed to old landfills. The Governor's proposal would avoid placing an unreasonable

burden on any one local government and allow us to use our resources for actual cleanup rather than legal action. When old landfill sites were in use, North Carolina citizens, businesses, and industries benefited from their existence as a place to dispose of waste. The surcharge on waste disposal is a way for citizens, businesses, and industries to form a partnership for cleanup and redevelopment of these old landfill sites.

There is great interest this session of the General Assembly in strengthening requirements for landfills permitted in North Carolina. I encourage you to take a close look at legislation that will be introduced, specifically this initiative and what it can bring to your jurisdiction.

If you have questions regarding the program for clean-up of old landfills, please contact Jack Butler, Chief of the Superfund Section, at jack.butler@ncmail.net or call (919)508-8450.

Sincerely,

A handwritten signature in dark ink, appearing to read "Dexter R. Matthews". The signature is fluid and cursive, with the first name "Dexter" being more prominent.

Dexter R. Matthews, Director

cc: David Thompson, NCACC
Jack Butler, Chief – Superfund Section



North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director

Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary

February 27, 2007

<SAL> <FIRST> <LAST>
<TITLE>, <MUNICIPALITY>
<ADDRESS>
<TOWN>, North Carolina <ZIP>

Subject: Assessment, Cleanup, and Redevelopment of Old Landfill Sites Within Your Jurisdiction

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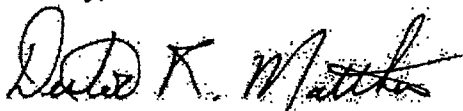
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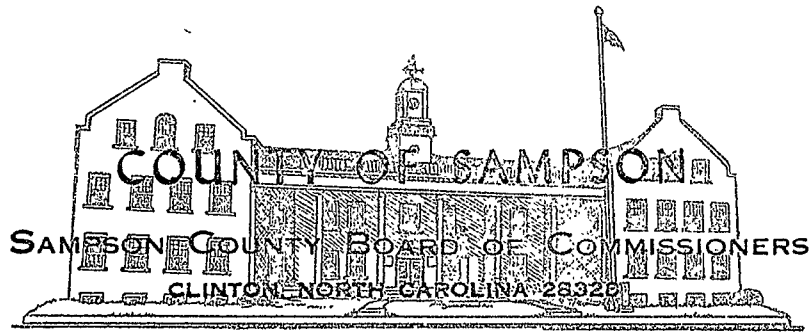
A handwritten signature in dark ink, appearing to read "Dexter R. Matthews". The signature is fluid and cursive, with the first name "Dexter" and last name "Matthews" clearly distinguishable.

Dexter R. Matthews, Director

cc: Ellis Hankins, NCLM
Jack Butler, Chief – Superfund Section

The mailing list for these letters is filed in a folder in the first file cabinet drawer for the old landfill sites.

A statewide Old Landfill Inventory report is filed in a folder in the first file cabinet drawer for the old landfill sites.



M. SHERRILL WILLIAMS ✓
LONNIE J. BASS

PERRY B. LOCKERMAN, CHAIRMAN

DANIEL W. McLAMB
GARRETT S. STRICKLAND

September 11, 1972

Mr. Sidney H. Usry, Sanitary Engineering Director
Insect and Vector Control Section
Sanitary Engineering Division
State Board of Health
Raleigh, North Carolina

Dear Mr. Usry:

Enclosed herewith plan of operation for the Sampson County
Solid Waste Management for FY 1973-72.

Request modification of the State Board of Health regulations governing solid waste disposal, as per enclosed plan. This request is made due to the economic conditions of Sampson County.

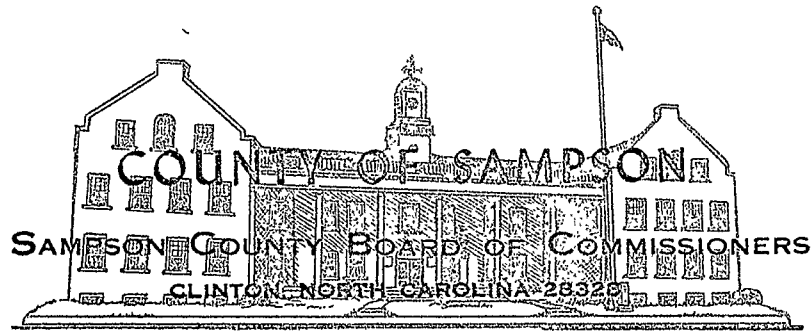
Thank you for the consideration.

Sincerely yours,

William B. Shaw R.S.
William B. Shaw
San. Supv. I

WBS:w

Encl.



M. SHERRILL WILLIAMS
LONNIE J. BASS

PERRY B. LOCKERMAN, CHAIRMAN

DANIEL W. McLAMB
GARRETT S. STRICKLAND

SAMPSON COUNTY SOLID WASTE MANAGEMENT

1. The Sampson County Solid Waste Management Program proposal as follows:

a. Continue to operate five modified and two sanitary landfills and add two additional low volume sites.

1. Six sites as proposed by Sanitary Engineering Division, N. C. State Board of Health Solid Waste and Vector Control Section in 1970. The six sites to be operated and area utilized as plans prepared by Mr. Jerry C. Perkins, Sanitary Engineer of Solid Waste and Vector Control Section, Sanitary Engineering Division, N. C. State Board of Health, November 9, 1970 and December 18, 1970, with modifications of trenches and the Warren property to a trench the length of the property. These modifications made to facilitate drainage and digging.

Site attendants are to be provided at Site No. 2, Rowan Rowan Road (Thompson Property) and Site 6, Roseboro-Salemburg. These landfills will be opened Monday - Friday from 7 A. M. to 6 P. M. and Saturday from 7 A. M. to 3 P. M. Compaction and covering daily, closed Sunday and holidays.

Sites 1, 3, 5, 6, 7, 8, 9 low volume site will not be closed, but will be covered daily - Monday through Friday.

Site 1, is a low volume site serving rural areas and Newton Grove which has twice a week pick up and one garment manufacturing corporation.

Site 2, is a high volume site serving the greater (out of city limits) Clinton area town of Turkey with no collection service and eight industries.

Site 3, a very low volume site serving rural area.

Site 4, a low volume site serving the Town of Garland twice a week collection and rural area.

Site 5, a low volume site serving rural area.

Site 6, a high volume site serving the Town of Roseboro and Salemburg with twice a week collection. One industry using site. This site also serves the Town of Autryville which has no collection service and a large thickly populated rural area.

Site 7, a low volume site serving rural area. This is used for tires and tree limbs and stumps.

Site 8, a low volume site to be located in the Northeast area of County to serve strictly a rural area with no industrial waste.

Site 9, a low volume site to be located in the Northwest area to County to serve strictly a rural area with no industrial waste.

We propose to cover these sites with equipment moving from site to site spending more time at sites 2 and 6. Saturday coverage to be provided at sites 2 and 6 only.

REQUEST modification from the Rules and Regulations providing standards for Solid Waste Disposal as adopted by the N. C. State Board of Health for Sites No's 1, 3, 4, 5, 7, 8 and 9.

NORTH CAROLINA
STATE BOARD OF HEALTH
RALEIGH

December 18, 1970

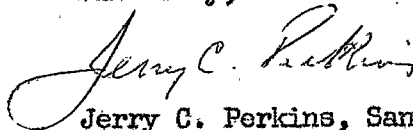
Mr. W. B. Shaw, R.S.
Sampson County Health Department
Cooper Drive
Clinton, North Carolina 28328

Dear Mr. Shaw:

Please find enclosed the investigative report for the conditions prevailing at the five proposed sanitary landfill sites and recommendations for operation at each.

If this section can be of further assistance, do not hesitate to call.

Sincerely,



Jerry C. Perkins, Sanitary Engineer
Solid Waste & Vector Control Section
Sanitary Engineering Division

Enclosure

✓ cc: Mr. Fred J. Wood

NORTH CAROLINA
STATE BOARD OF HEALTH
RALEIGH

December 18, 1970

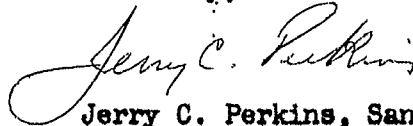
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Cooper Drive
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Sincerely,



Jerry C. Perkins, Sanitary Engineer
Solid Waste & Vector Control Section
Sanitary Engineering Division

Enclosure

✓ cc: Mr. Fred J. Wood

STATE BOARD OF HEALTH
SANITARY ENGINEERING DIVISION
RALEIGH, NORTH CAROLINA

REPORT OF INVESTIGATION OR INSPECTION OF Five Proposed Sanitary Landfills

Place visited Sampson County Date November 10 and 12 1970

Address Sampson County Time spent 2 days

By whom Jerry C. Perkins, Sanitary Engineer and Fred J. Wood, District Sanitarian

Persons contacted Mr. W. B. Shaw
(Owner, agent, tenant, manager, other)

Reason for visit To investigate sites and to determine feasible operating plans for each site.

Copies to: Mr. W. B. Shaw, R.S., Sampson County Health Department

Mr. Fred J. Wood, District Sanitarian

REPORT:

On November 10 and 12, 1970, Mr. Jerry C. Perkins, Sanitary Engineer, N. C. State Board of Health, and Mr. Fred J. Wood, District Sanitarian, Greenville Regional Office, N. C. State Board of Health, investigated five proposed sanitary landfill sites in Sampson County to determine operational feasibility.

Below are the conditions found at each site and subsequent recommendations for each site. Also included are general recommendations for all sites. Usage data utilized in making recommendations was obtained from Mr. W. B. Shaw, Sampson County Sanitarian.

Site No. 1 — Medlin Property

Conditions:

Site is located approximately 7.5 miles south of Newton Grove, off SR 1820. Tract contains 5.13 acres. Terrain is rolling. Soil condition was observed to be sandy with good subsurface drainage. The only parameters to the site are the property lines as the site is not dissected by streams, fences, etc. that usually act as natural barriers in landfill development. The site's drainage will drain to a tributary belonging to the Great Coharie Watershed. The planned usage and overall terrain lends itself to the trench method of disposal by sanitary landfill. No water table problems are anticipated as the nearest stream elevation is 20-25 feet lower than the site elevation. Information available indicates that a rural population of 7,357 persons, including Newton Grove and one industry, will utilize the site. A disadvantage to the site may prove to be the access road length from the State roads; however, adequate signs designating location can help alleviate this problem. Low industrial usage is anticipated.

Recommendations:

1. Develop Site No. 1 in accordance with the attached plans, utilizing the trench method of disposal by sanitary landfill.
2. Develop the trenches as indicated, developing Sections A, B, C, D, E, F, and G in that order. This will permit minimum clearing required at any one time and will allow excess of cover material to be in close proximity at all times.
3. Develop Section D by the ramp method after A and C are completed.
4. Maintain the existing natural ridge in its natural state to serve as a central access and to serve as the last area to be used in disposal operations.
5. Trench dimensions required for this site as follows: Depth, no more than 8 feet; Width, 12-foot bottom with slight slope because of soil condition; Length, 150-200 feet should be adequate for any one trench.
6. Improve the access road in order to accommodate the heavy delivery vehicles using the sites.

Site No. 2 - Thompson Property

Conditions:

Located approximately 4 miles east of Clinton off SR 1924. Tract contains 10.0 acres. Terrain has a moderate roll and soil condition was observed to be good for cover material and subsurface drainage. Parameters to the site are its property lines. Site's drainage is to Abrams Branch. The usage data and overall terrain indicates that the trench method of disposal would be the most suitable type of operation. No water table problems are anticipated as the major portion of the acreage has sufficient elevation and the remainder lends itself to a ramp operation which requires covering and compacting above the original ground level.

Information available indicates that a rural population of 9,778 persons will be served by this site. A private collector serving 100 persons will also use the site. A moderate amount of industrial waste is anticipated at this time.

Recommendations:

1. Develop Site No. 2 in accordance with the attached plans, utilizing the trench method of disposal in Section A and a combination ramp and trench method in Sections B and C.
2. Direct surface drainage to drainage draw leading to Abrams Branch.
3. Trench and ramp dimensions required on this site are as follows: Width, 12 feet; Depth, no more than eight required in any section; Length, no more than 300 feet required at any one time.
4. Improve the access road to accommodate heavy vehicular wheel loads.

Site No. 3 - Mac Millon Property

Conditions:

Located approximately 4 miles southwest of Harrells off SR 1100. Tract contains 3.70 acres. The terrain of the site is rolling with elevation changes of approximately 20 feet from the site's lowest elevation to its highest. Soil condition was observed to be a sandy clay mixture suitable for landfilling. Parameters to the site's development are the property lines. Site drainage is on the Black River Watershed. No water table problems are anticipated on this site. Information available indicates that a rural population of 2,256 persons will be served by this site. The only anticipated industrial waste of significance to be received at the site at the present time is hatchery waste. The access road into the site is in need of upgrading to accommodate the heavy wheel loading of solid waste delivery vehicles. Signs will be needed to direct users to the site's deposit area. Anticipated usage indicates that a trench and ramp combination operation is best suited to the type of terrain on this site.

Recommendations:

1. Develop Site No. 3 in accordance with the attached plans, utilizing a combination trench and ramp method of disposal by sanitary landfill in Sections B and C, and trench method in Section A.
2. Develop Sections B and C first, then Section A to preclude use of final cover in an inadvertent trench operation.
3. Trench and ramp dimensions required as follows: Width, 10 feet; Depth, no more than 8 feet of compacted refuse in any section; and Length, no more than 150 feet of trench required at any one time.
4. Improve the access road and turn-around area to accommodate the heavy vehicular wheel loads using this site.

Site No. 4 - Balkcum Property

Conditions:

Site No. 4 is located approximately 4 miles east of Garland off SR 1003. The tract contains 5.4 acres and an abandoned borrow pit is located within its boundaries. The borrow pit extends to the highway shoulder, however, the property line is on the highway right-of-way lines requiring dyking for separation. Six Runs Creek is located to the east of the site with an average separation distance of 50 feet between the creek bank and the eastern property lines. An existing entrance road to the site is located between the borrow pit edge and the eastern property line. The borrow pit contains approximately 1.4 acres and its excavated bottom is 6 to 8 feet lower than the surrounding elevations. The site drainage on the southern end is generally away from the creek. Depending on the amount of rainfall and surface runoff, a culvert under SR 1003 may be necessary to prevent impounding of runoff water from the landfill site. Surface drainage on the northern end is generally toward the Six Runs

Creek. No water table problems are anticipated as long as excavations are no lower than those established by the existing borrow pits.

Information available indicates that this site will serve a rural population of 4,894 persons including the Town of Garland's pickup of residential, commercial, and industrial waste.

A distance of approximately 100 feet has been maintained from the creek bank to the borrow pit edge. This distance will have to be maintained with new excavations to provide a buffer zone to prevent contamination of the creek by landfill leachate. No major industrial waste is anticipated at this time.

Recommendations:

1. Develop this site in accordance with the attached plans, utilizing the borrow pit area first, then Section B, and finally Section C.
2. Do not operate any closer than the existing borrow pit edge to the creek or no closer than 100 feet to the creek bank in the undisturbed area.
3. Utilize earth from bottom of pit and from sides for cover material.
4. Excavate no lower than the established low area in the existing borrow pit.
5. Dimensions for ramp operations in the pit are as follows: Width, 10 feet; Depth, 6 to 8 feet of compacted refuse; and Length for trench operation, no more than 100 feet should be required at any one time.
6. Improve access road and turn around area to accommodate heavy delivery vehicles..

Site No. 5 - Warren Property

Conditions:

This site is located in the northwestern portion of the county off SR 1634. The tract contains 3.91 acres. This site can be used but has several undesirable characteristics which will generate added expense in site preparation. The location will require that a new access road be constructed. Also, the site is wooded and before any disposal operation can begin, clearing will have to take place. At the rear of the property, or its western boundary, is a low area containing waters backed up from the Little Coharie Creek Watershed. As a result, a high water table at this site is going to impose limitations on the site's development.

Information available indicates that this site will serve a rural population of 6,112 persons with no towns or private collectors using the site at the present time..

Recommendations:

1. Develop this site by trench and ramp operation as shown on the attached drawings..
2. Divert existing drainage ditch in order to extend length of operating trenches on the northern side..

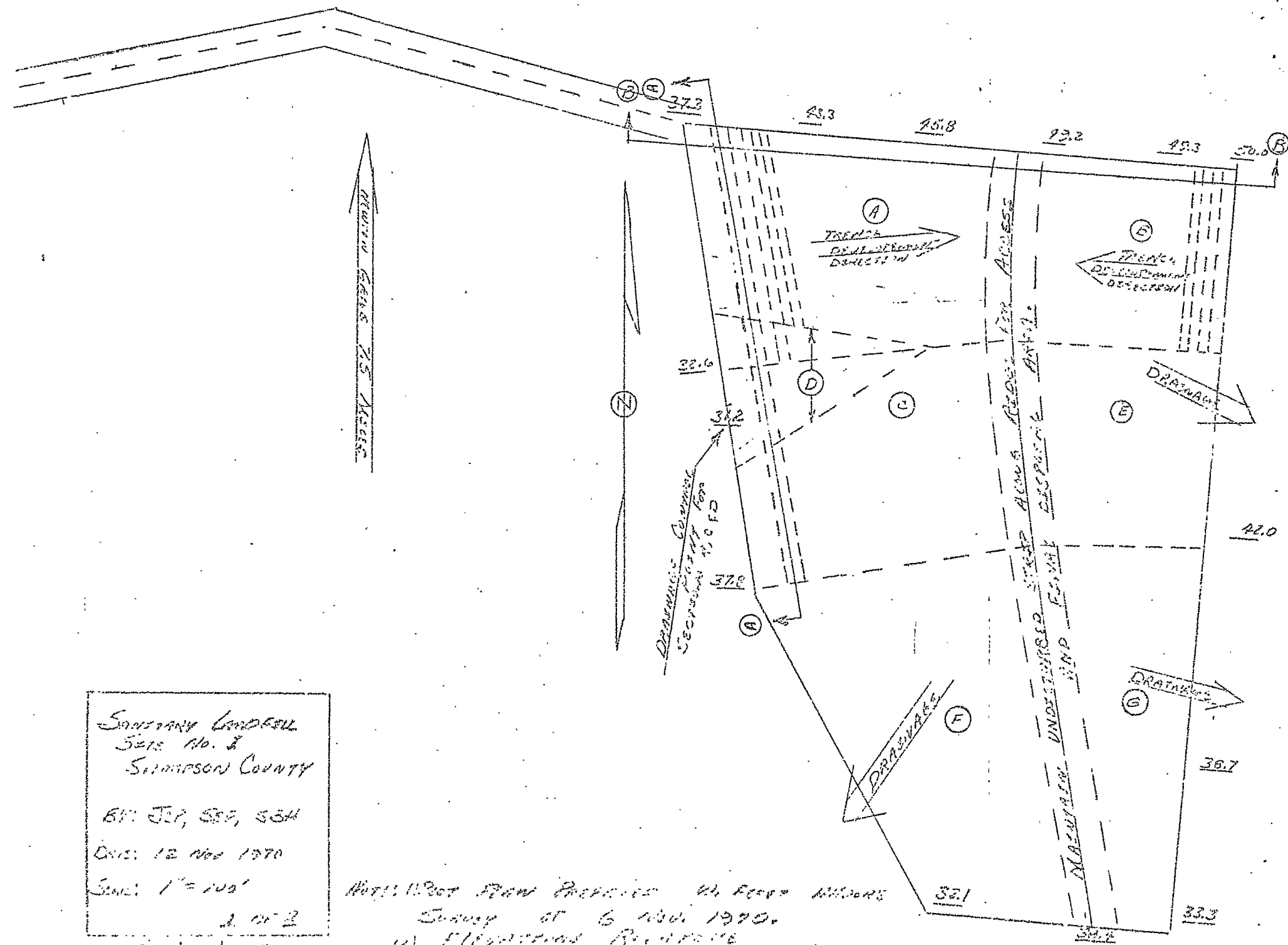
3. Maintain a slope on the trench bottom at all times to preclude any surface waters from running in the trench during times of heavy rains.
4. Trench and ramp dimensions are as follows: Width, 10 feet; Depth, no more than six feet compacted refuse at any location; and Length, no more than 150 feet required at any one time.
5. Construct roadway to standards that will accommodate heavy wheel loads of delivery vehicles.
6. Clear property on an as needed basis to prevent unnecessary erosion.

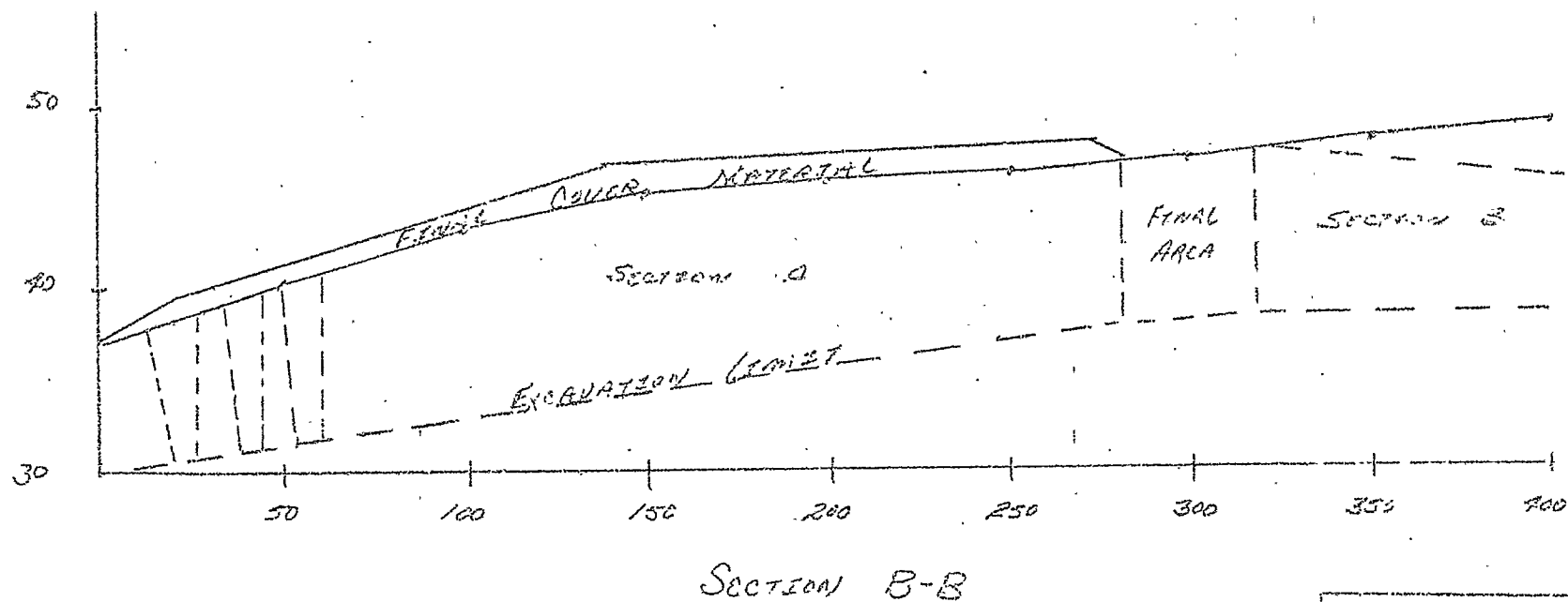
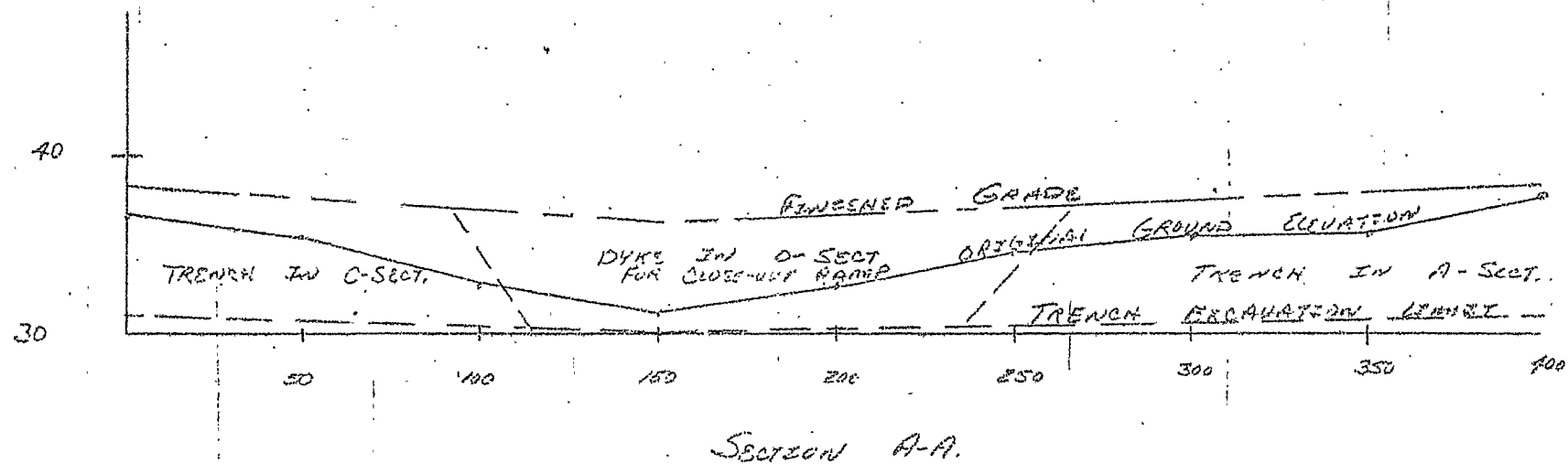
-----GENERAL RECOMMENDATIONS FOR ALL SITES-----

1. Compact all refuse deposited thoroughly and cover with a six-inch layer of earth. Completed sections will require two feet of final cover.
2. Improve access on all site roads as necessary and provide signs to adequately designate site location.
3. Provide site signs for user benefit.
4. No burning is to be allowed at any of the sites..
5. Keep sites policed of blowing paper at all times..

SHERMAN LANDRELL
 State No. 2
 SIMPSON COUNTY
 B1: J12, S35, S34
 DATE: 12 Nov 1970
 SCALE: 1" = 100'
 2 OF 2

NOT TO BE USED FOR PROPERTIES 44 FEET WIDE
 Survey of 6 Nov. 1970.
 (1) FLOODPLAIN RELEVANCE



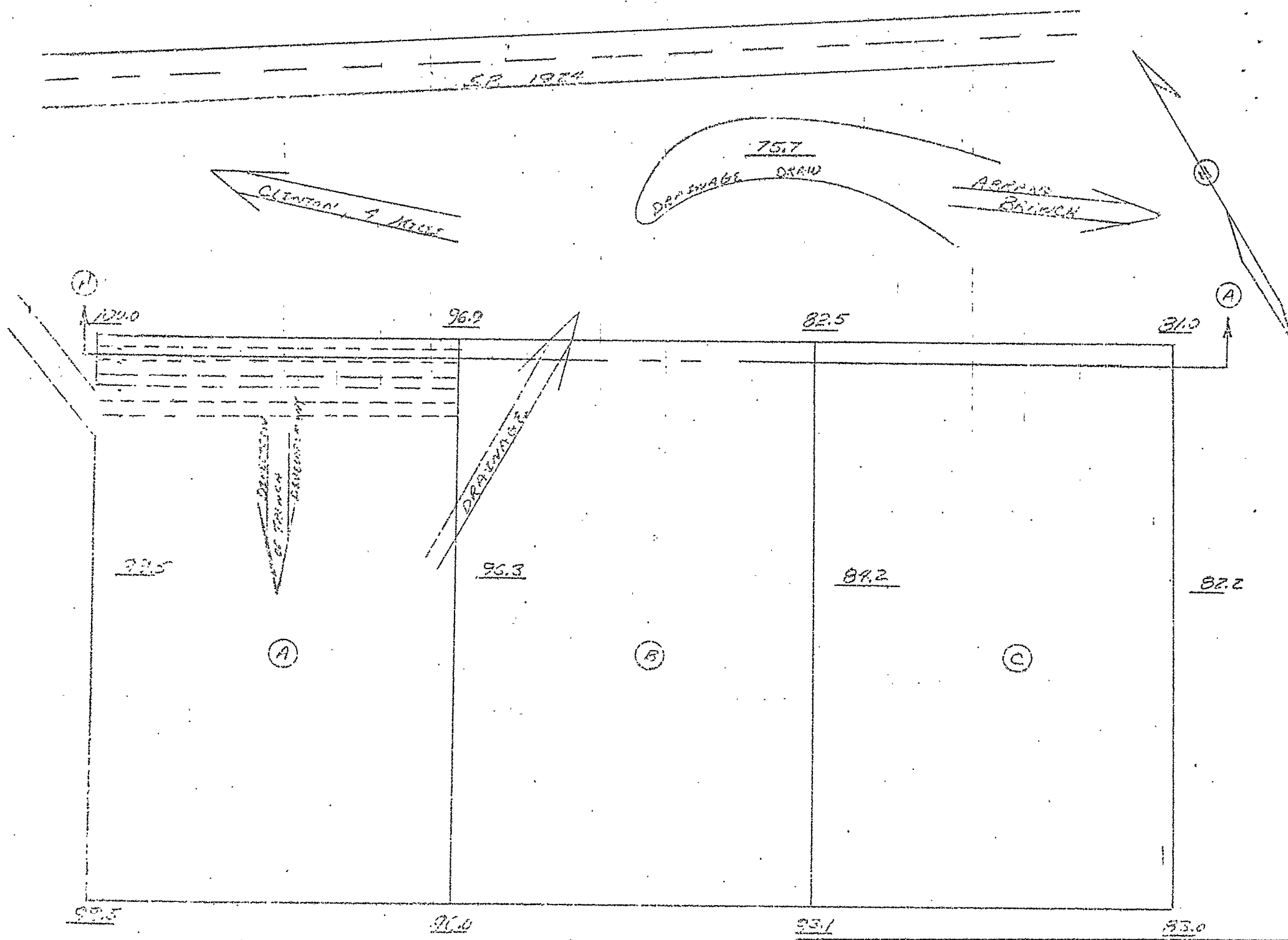


NOTE: ELEVATIONS, AS SHOWN, ARE RELATIVE ONLY

SITE No. 1
SECTIONS

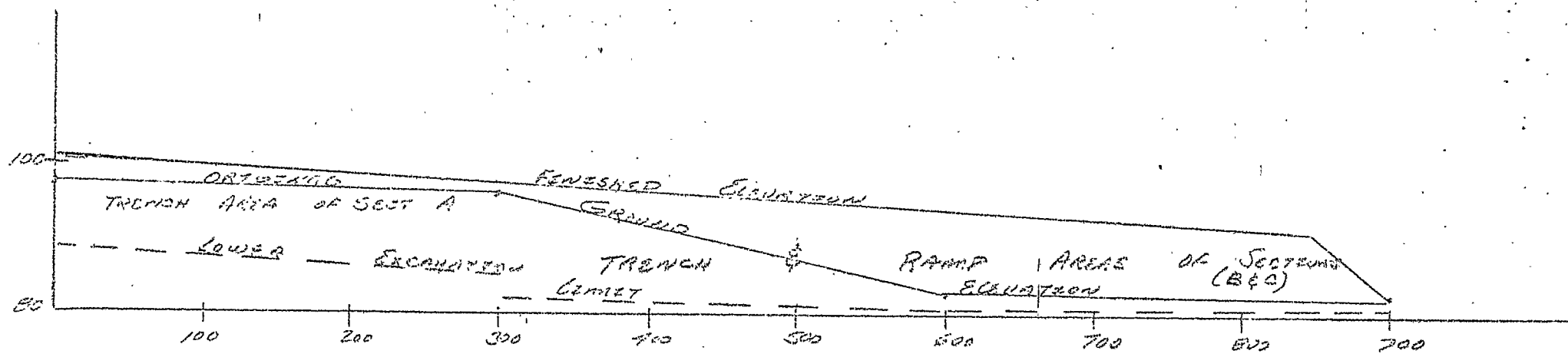
BY: JCP, SED, SBK
DATE: 12 NOV 1970
SCALE: AS SHOWN

3 OF 12



Notes: Refer to the Survey, All, Boundary Only

Site No. 2, Sampson County
 BY: J.P. SED, SRV DATED: 12/1/70 Scale 1"=100'



TYPICAL SECTION
(ELEVATIONS RELATIVE)

Site No. 2
SECTION

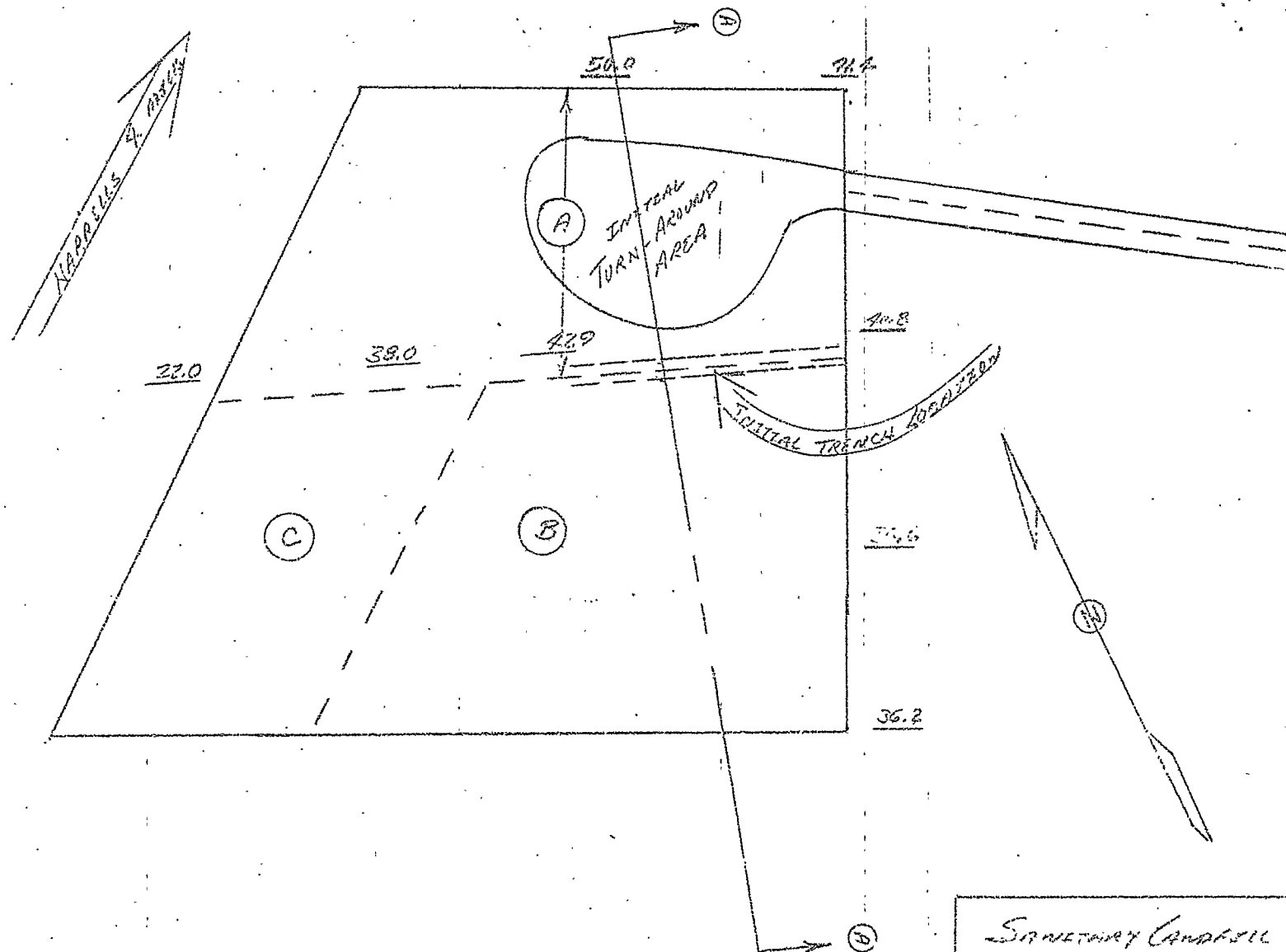
BY : JCP, SED, SRW

DATE : 12 NOV 70

Scale: As Shown

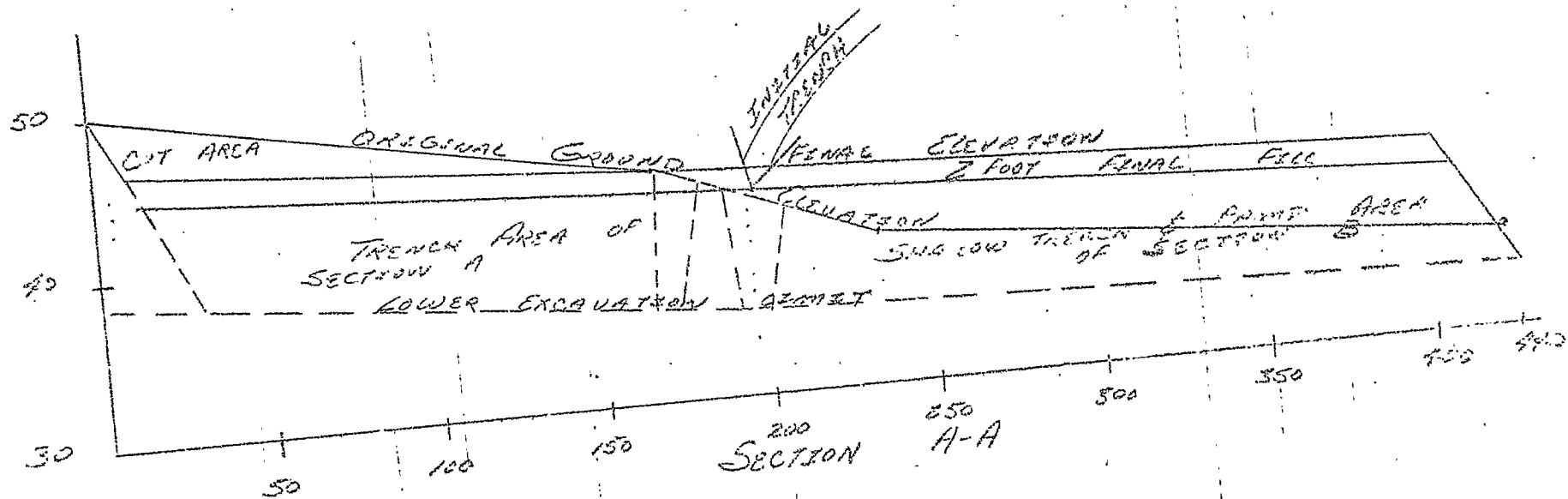
Notes: Elevation of Trench Area from Ground Surface
at 100' Station at 100' Station (See Section B&C)

I of 2



Note: See also Record

SURVEYOR LANDSILL
 SITE No. 3
 SIMPSON CO
 BY: JCP, SEP. 534
 DATE: 12/10/70
 SCALE: 1" = 100'



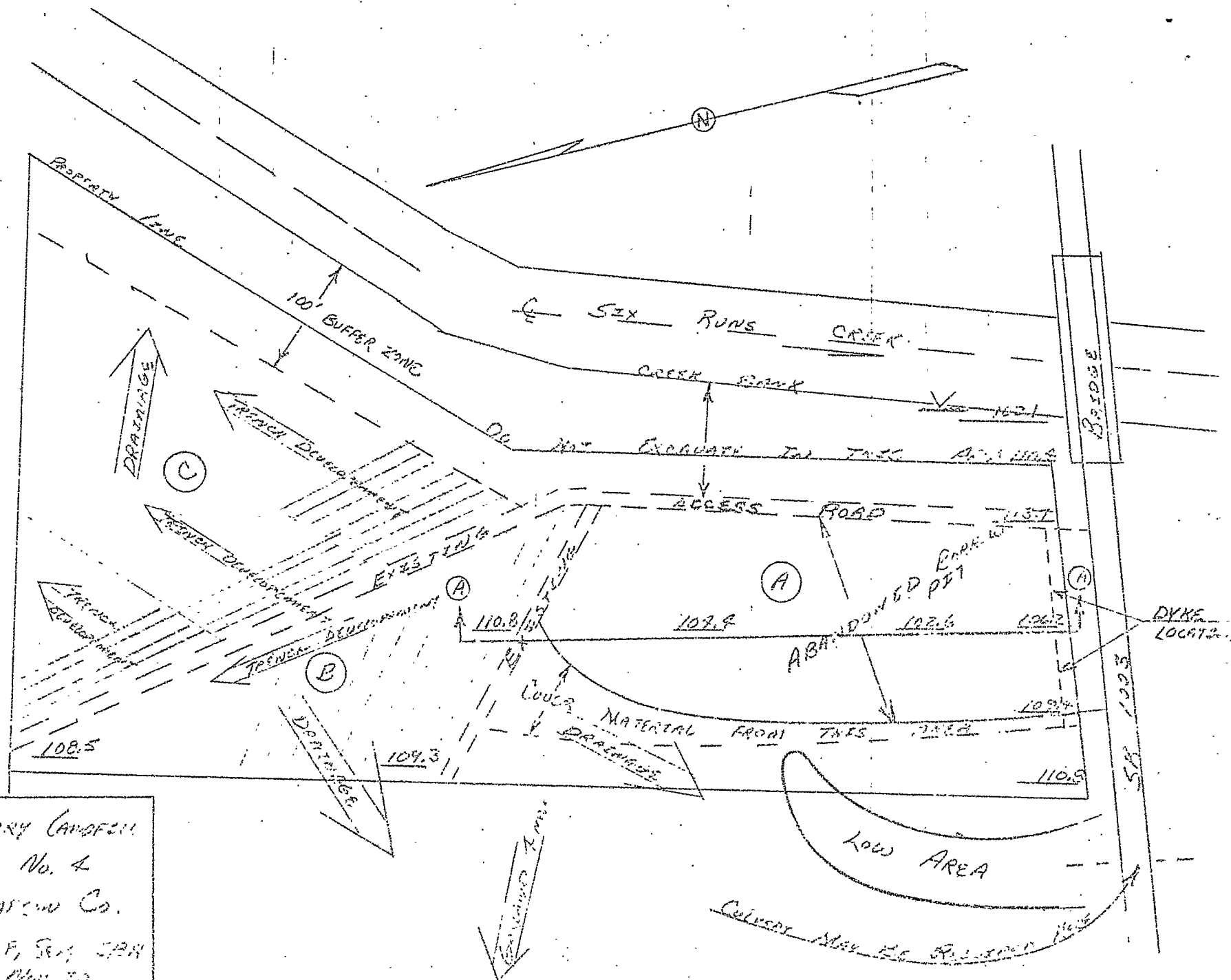
NOTE: ONLY RELATIVE ELEVATIONS ARE SHOWN

SITE No. 3
SECTION

BY: JCP, SEP, 53W

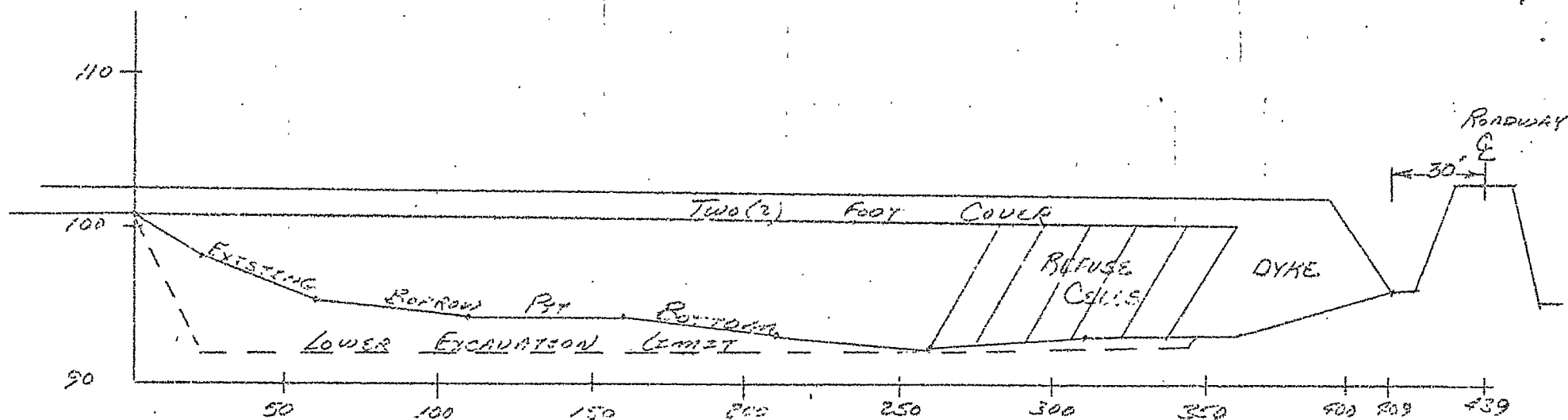
DATE: 12 NOV 70

SHEET No SHOWN
2 OF 3



SURVEY CAMPFILL
 SITE No. 4
 SAMSLOW CO.
 BY: JCF, SR, SPR
 DATE: 12 MAY 70
 SCALE: 1" = 100'

Notes: 1) Plot Area Relocated From 100' x 100' to 100' x 100'



SECTION A-A

SITE No. 4

SECTION
SAMPSON Co.

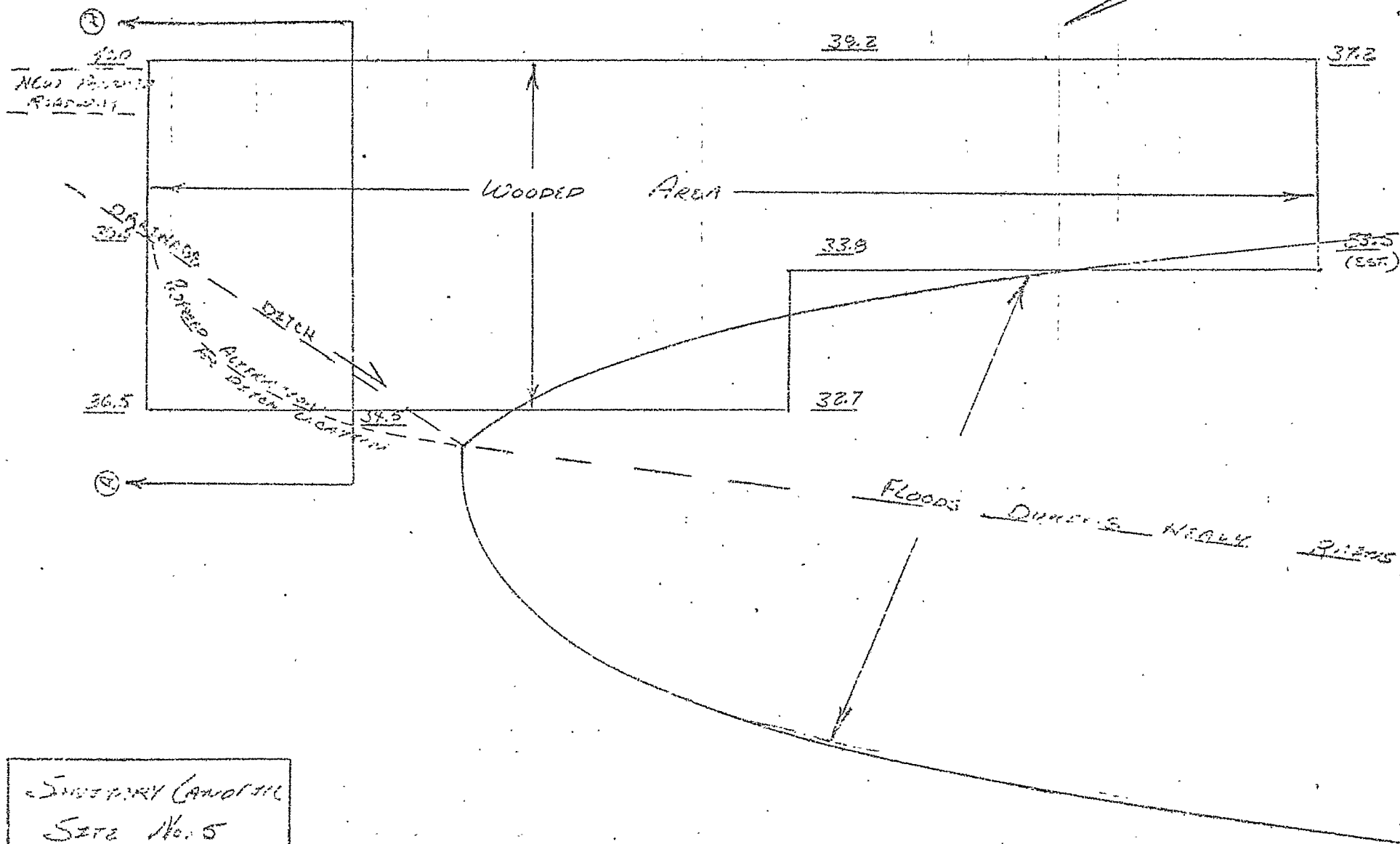
BY: JEP, SEP, SET

DATE: 12 NOV 70

SCALE: As Shown

E of B

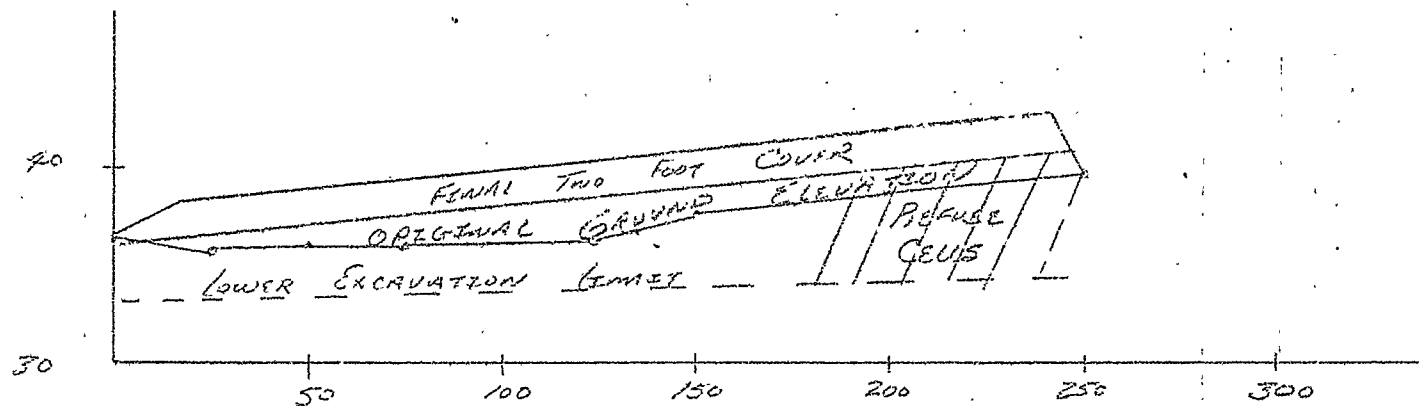
Note: Some alterations to the original plan.



SAN FRANCISCO
 SITE No. 5
 SAN FRANCISCO Co.

2nd COR. SEP. 20th
 1917. 12 AM TO
 5:00 PM. 1" = 100'

NOTE: ELEVATIONS, AS SHOWN, ARE RELATIVE.



SECTION A-A

NOTE: ALL ELEVATIONS SHOWN ARE RELATIVE.

SITE No. 5
SECTION
SAMPSON CO

BY: JEP, SEP, 584
DATE: 12 Nov 70
SCALE: AS SHOWN

December 18, 1970

Mr. W. B. Shaw, R.S.
~~Sampson~~ Sampson County Health Department
Cooper Drive
Clinton, North Carolina 28328

J+P
Dear Mr. Shaw:

Please find enclosed the investigative report for the conditions prevailing at the five proposed sanitary landfill sites and recommendations for operation at each.

If this section can be of further assistance, do not hesitate to call.

Sincerely,

Jerry C. Perkins, Sanitary Engineer
Solid Waste & Vector Control Section
Sanitary Engineering Division

JCP:bm
Enclosure
cc: Mr. Fred J. Wood

November 9, 1970

Mr. W. B. Shaw, R.S.
Sampson County Health Department
Cooper Drive
Clinton, North Carolina 28328

Dear Mr. Shaw: *JCP*

Please find enclosed a copy of the report, recommendations, and attached drawings for the Sampson County Sanitary Landfill operation near Roseboro.

If this section can be of further assistance, do not hesitate to call.

Sincerely,

Jerry C. Perkins, Sanitary Engineer
Solid Waste & Vector Control Section
Sanitary Engineering Division

JCP:bm
Enclosure
cc: Mr. Fred J. Wood

STATE BOARD OF HEALTH
SANITARY ENGINEERING DIVISION
RALEIGH, NORTH CAROLINA

REPORT OF INVESTIGATION OR INSPECTION OF Five Proposed Sanitary Landfills

Place visited Sampson County Date November 10 and 12 19 70
Address Sampson County Time spent 2 days
By whom Jerry C. Perkins, Sanitary Engineer and Fred J. Wood, District Sanitarian
Persons contacted Mr. W. B. Shaw
(Owner, agent, tenant, manager, other)

Reason for visit To investigate sites and to determine feasible operating plans for each site.

Copies to: Mr. W. B. Shaw, R.S., Sampson County Health Department
Mr. Fred J. Wood, District Sanitarian

REPORT:

On November 10 and 12, 1970, Mr. Jerry C. Perkins, Sanitary Engineer, N. C. State Board of Health, and Mr. Fred J. Wood, District Sanitarian, Greenville Regional Office, N. C. State Board of Health, investigated five proposed sanitary landfill sites in Sampson County to determine operational feasibility.

Below are the conditions found at each site and subsequent recommendations for each site. Also included are general recommendations for all sites. Usage data utilized in making recommendations was obtained from Mr. W. B. Shaw, Sampson County Sanitarian.

Site No. 1 - Medlin Property

Conditions:

Site is located approximately 7.5 miles south of Newton Grove, off SR 1820. Tract contains 5.13 acres. Terrain is rolling. Soil condition was observed to be sandy with good subsurface drainage. The only parameters to the site are the property lines as the site is not dissected by streams, fences, etc. that usually act as natural barriers in landfill development. The site's drainage will drain to a tributary belonging to the Great Coharie Watershed. The planned usage and overall terrain lends itself to the trench method of disposal by sanitary landfill. No water table problems are anticipated as the nearest stream elevation is 20-25 feet lower than the site elevation. Information available indicates that a rural population of 7,357 persons, including Newton Grove and one industry, will utilize the site. A disadvantage to the site may prove to be the access road length from the State roads; however, adequate signs designating location can help alleviate this problem. Low industrial usage is anticipated.

Recommendations:

1. Develop Site No. 1 in accordance with the attached plans, utilizing the trench method of disposal by sanitary landfill.
2. Develop the trenches as indicated, developing Sections A, B, C, D, E, F, and G in that order. This will permit minimum clearing required at any one time and will allow excess of cover material to be in close proximity at all times.
3. Develop Section D by the ramp method after A and C are completed.
4. Maintain the existing natural ridge in its natural state to serve as a central access and to serve as the last area to be used in disposal operations.
5. Trench dimensions required for this site as follows: Depth, no more than 8 feet; Width, 12-foot bottom with slight slope because of soil condition; Length, 150-200 feet should be adequate for any one trench.
6. Improve the access road in order to accommodate the heavy delivery vehicles using the sites.

Site No. 2 - Thompson Property

Conditions:

Located approximately 4 miles east of Clinton off SR 1924. Tract contains 10.0 acres. Terrain has a moderate roll and soil condition was observed to be good for cover material and subsurface drainage. Parameters to the site are its property lines. Site's drainage is to Abrams Branch. The usage data and overall terrain indicates that the trench method of disposal would be the most suitable type of operation. No water table problems are anticipated as the major portion of the acreage has sufficient elevation and the remainder lends itself to a ramp operation which requires covering and compacting above the original ground level.

Information available indicates that a rural population of 9,778 persons will be served by this site. A private collector serving 100 persons will also use the site. A moderate amount of industrial waste is anticipated at this time.

Recommendations:

1. Develop Site No. 2 in accordance with the attached plans, utilizing the trench method of disposal in Section A and a combination ramp and trench method in Sections B and C.
2. Direct surface drainage to drainage draw leading to Abrams Branch.
3. Trench and ramp dimensions required on this site are as follows: Width, 12 feet; Depth, no more than eight required in any section; Length, no more than 300 feet required at any one time.
4. Improve the access road to accommodate heavy vehicular wheel loads.

Site No. 3 - Mac Millon Property

Conditions:

Located approximately 4 miles southwest of Harrells off SR 1100. Tract contains 3.70 acres. The terrain of the site is rolling with elevation changes of approximately 20 feet from the site's lowest elevation to its highest. Soil condition was observed to be a sandy clay mixture suitable for landfilling. Parameters to the site's development are the property lines. Site drainage is on the Black River Watershed. No water table problems are anticipated on this site. Information available indicates that a rural population of 2,256 persons will be served by this site. The only anticipated industrial waste of significance to be received at the site at the present time is hatchery waste. The access road into the site is in need of upgrading to accommodate the heavy wheel loading of solid waste delivery vehicles. Signs will be needed to direct users to the site's deposit area. Anticipated usage indicates that a trench and ramp combination operation is best suited to the type of terrain on this site.

Recommendations:

1. Develop Site No. 3 in accordance with the attached plans, utilizing a combination trench and ramp method of disposal by sanitary landfill in Sections B and C, and trench method in Section A.
2. Develop Sections B and C first, then Section A to preclude use of final cover in an inadvertent trench operation.
3. Trench and ramp dimensions required as follows: Width, 10 feet; Depth, no more than 8 feet of compacted refuse in any section; and Length, no more than 150 feet of trench required at any one time.
4. Improve the access road and turn-around area to accommodate the heavy vehicular wheel loads using this site.

Site No. 4 - Balkcum Property

Conditions:

Site No. 4 is located approximately 4 miles east of Garland off SR 1003. The tract contains 5.4 acres and an abandoned borrow pit is located within its boundaries. The borrow pit extends to the highway shoulder, however, the property line is on the highway right-of-way lines requiring dyking for separation. Six Runs Creek is located to the east of the site with an average separation distance of 50 feet between the creek bank and the eastern property lines. An existing entrance road to the site is located between the borrow pit edge and the eastern property line. The borrow pit contains approximately 1.4 acres and its excavated bottom is 6 to 8 feet lower than the surrounding elevations. The site drainage on the southern end is generally away from the creek. Depending on the amount of rainfall and surface runoff, a culvert under SR 1003 may be necessary to prevent impounding of runoff water from the landfill site. Surface drainage on the northern end is generally toward the Six Runs

Creek. No water table problems are anticipated as long as excavations are no lower than those established by the existing borrow pits.

Information available indicates that this site will serve a rural population of 4,894 persons including the Town of Garland's pickup of residential, commercial, and industrial waste.

A distance of approximately 100 feet has been maintained from the creek bank to the borrow pit edge. This distance will have to be maintained with new excavations to provide a buffer zone to prevent contamination of the creek by landfill leachate. No major industrial waste is anticipated at this time.

Recommendations:

1. Develop this site in accordance with the attached plans, utilizing the borrow pit area first, then Section B, and finally Section C.
2. Do not operate any closer than the existing borrow pit edge to the creek or no closer than 100 feet to the creek bank in the undisturbed area.
3. Utilize earth from bottom of pit and from sides for cover material.
4. Excavate no lower than the established low area in the existing borrow pit.
5. Dimensions for ramp operations in the pit are as follows: Width, 10 feet; Depth, 6 to 8 feet of compacted refuse; and Length for trench operation, no more than 100 feet should be required at any one time.
6. Improve access road and turn around area to accommodate heavy delivery vehicles.

Site No. 5 - Warren Property

Conditions:

This site is located in the northwestern portion of the county off SR 1634. The tract contains 3.91 acres. This site can be used but has several undesirable characteristics which will generate added expense in site preparation. The location will require that a new access road be constructed. Also, the site is wooded and before any disposal operation can begin, clearing will have to take place. At the rear of the property, or its western boundary, is a low area containing waters backed up from the Little Coharie Creek Watershed. As a result, a high water table at this site is going to impose limitations on the site's development.

Information available indicates that this site will serve a rural population of 6,112 persons with no towns or private collectors using the site at the present time.

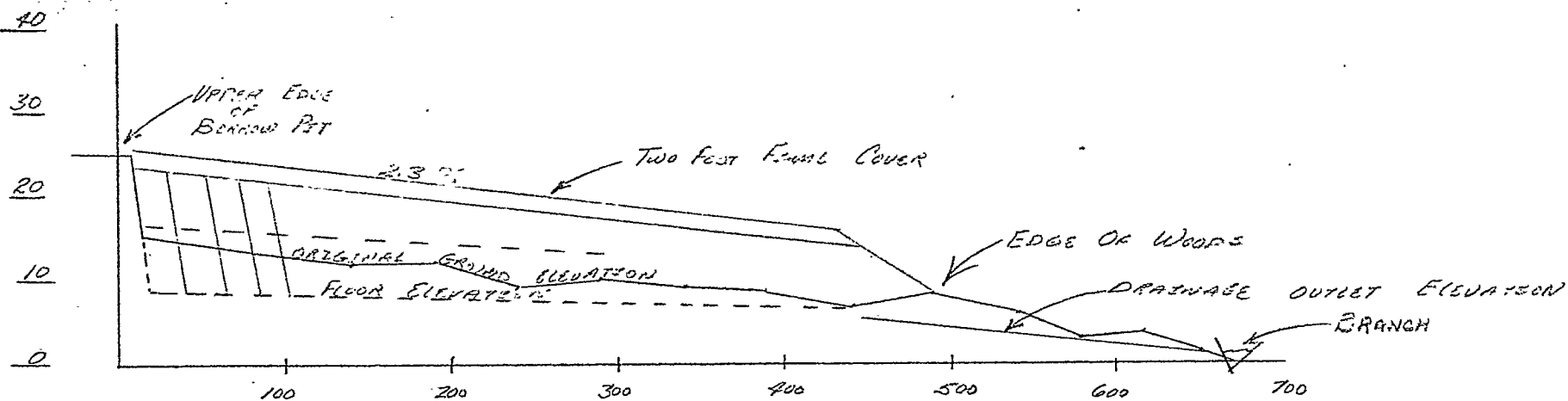
Recommendations:

1. Develop this site by trench and ramp operation as shown on the attached drawings.
2. Divert existing drainage ditch in order to extend length of operating trenches on the northern side.

3. Maintain a slope on the trench bottom at all times to preclude any surface waters from running in the trench during times of heavy rains.
4. Trench and ramp dimensions are as follows: Width, 10 feet; Depth, no more than six feet compacted refuse at any location; and Length, no more than 150 feet required at any one time.
5. Construct roadway to standards that will accommodate heavy wheel loads of delivery vehicles.
6. Clear property on an as needed basis to prevent unnecessary erosion.

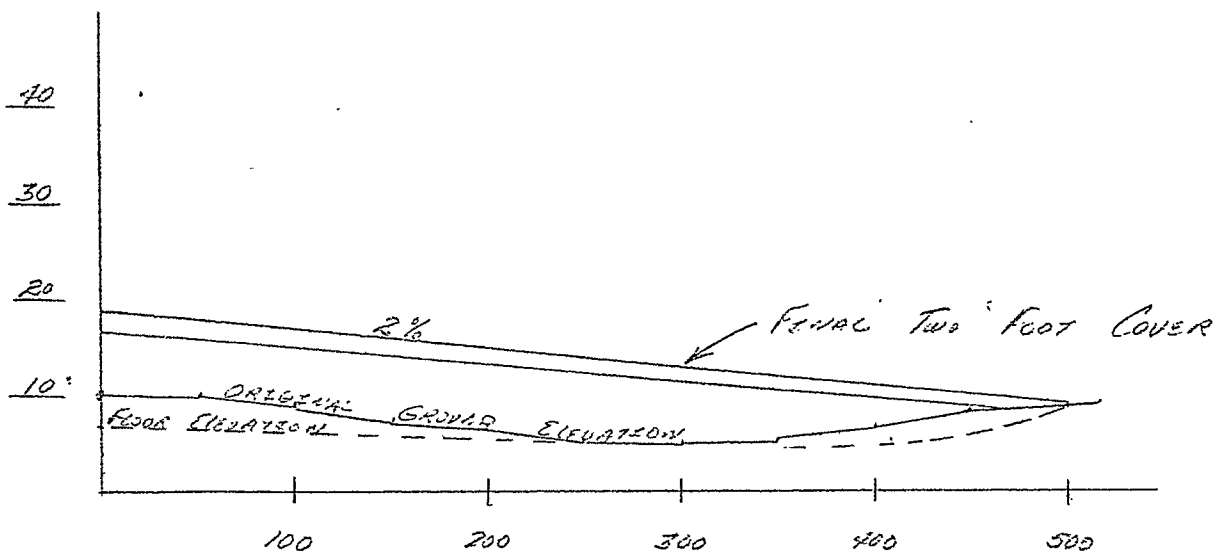
GENERAL RECOMMENDATIONS FOR ALL SITES

1. Compact all refuse deposited thoroughly and cover with a six-inch layer of earth. Completed sections will require two feet of final cover.
2. Improve access on all site roads as necessary and provide signs to adequately designate site location.
3. Provide site signs for user benefit.
4. No burning is to be allowed at any of the sites.
5. Keep sites policed of blowing paper at all times.



SECTION A-B

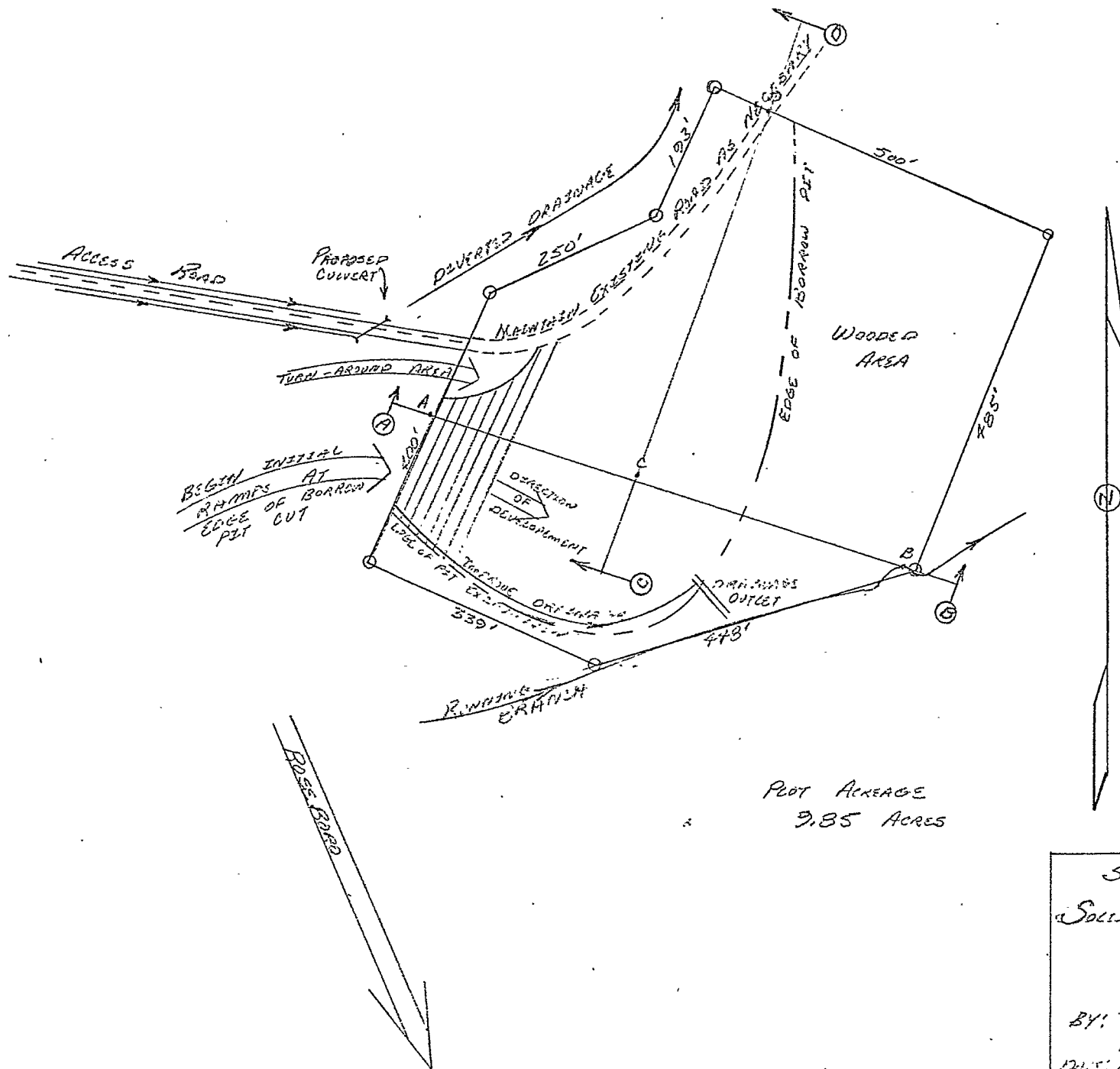
- NOTE (1) INITIAL RAMP IN TWO (2) SIX FOOT LEFTS.
 (2) MAINTAIN FLOOR ELEVATION SO THAT SURFACE DRAINAGE CAN BE IMPROVED AS NECESSARY.



SECTION C-D

SAMUEL CO
 CROSS-SECTIONS OF
 THE SOIL WHERE
 DISPOSAL SITE
 NEAR ROSEBORO
 BY: JCP SED
 DATE: 29 OCT 70
 SCALE: AS SHOWN
 SHEET NO. 2 OF 2

Private Road No. 1002



PLOT AREA
9.85 ACRES

SAMPSON Co.
SOLID WASTE DISPOSAL
SITE

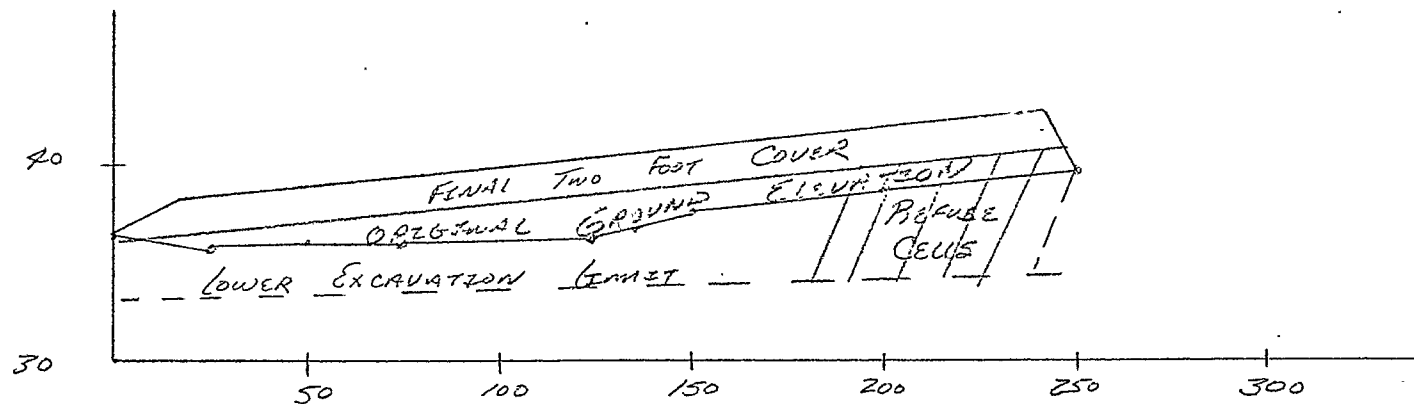
BY: JLP SLD SF

DATE: 29 OCT 1970

SCALE: 1" = 200'

SHEET No. 1 OF 2

NOTE: PLOT PLAN PREPARED FROM U. S. E. E. A. P. 2 SURVEY OF 28 SEPT. 1970.

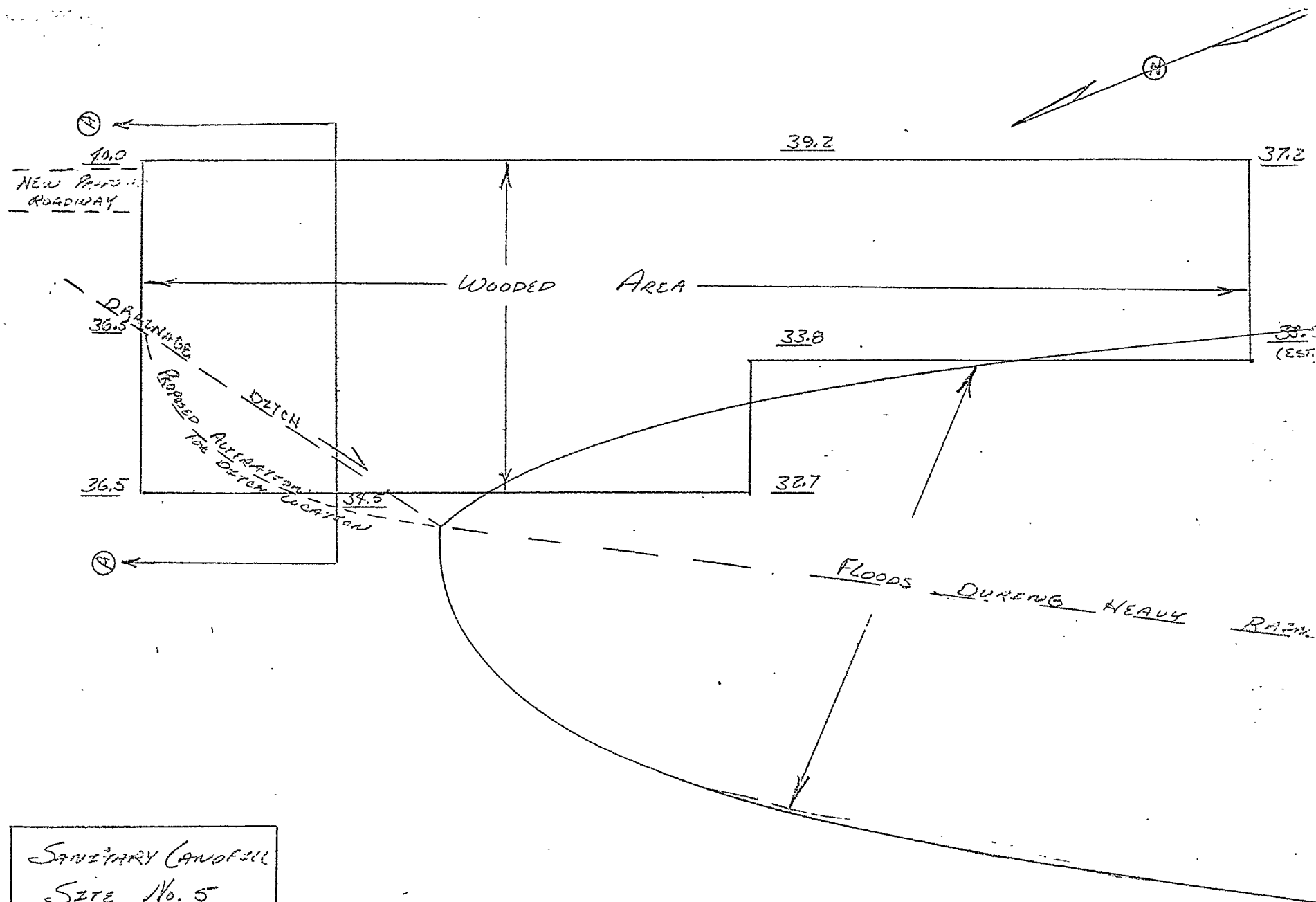


SECTION A-A

NOTE: ALL ELEVATIONS SHOWN ARE RELATIVE

SITE No. 5
SECTION
SAMPSON CO

BY: JCP, SEP, SE
DATE: 12 Nov 70
SCALE: AS SHOWN
2 OF 3

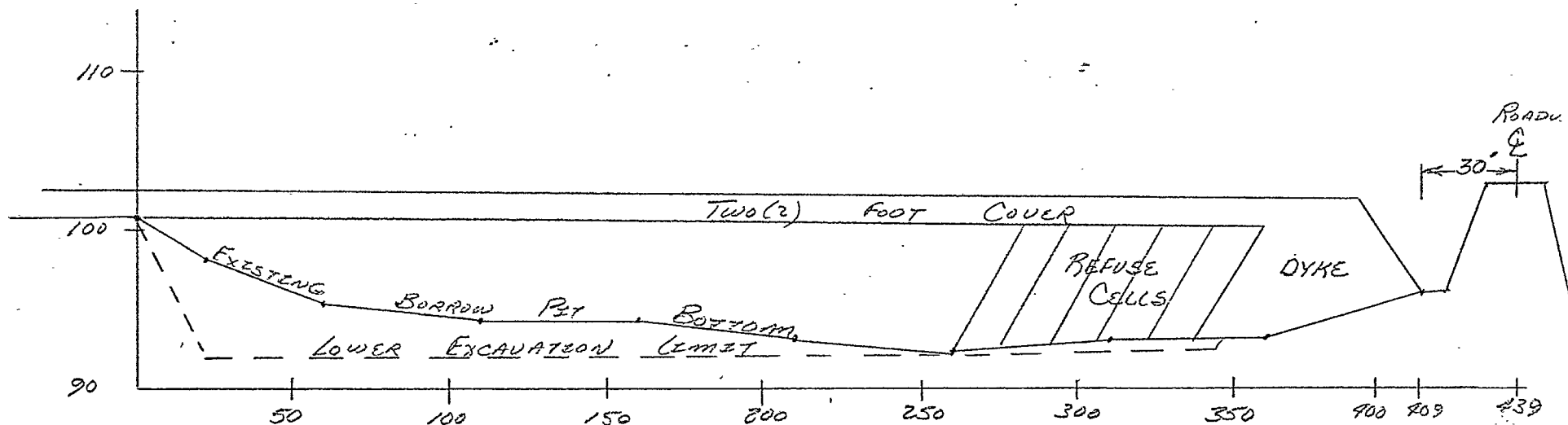


SANITARY LANDFILL
SITE No. 5
SAMPSON Co.

SPR. TOP, SEC. 504
SPR. 12000 TO
SCALE: 1" = 100'

3.91 ACRES

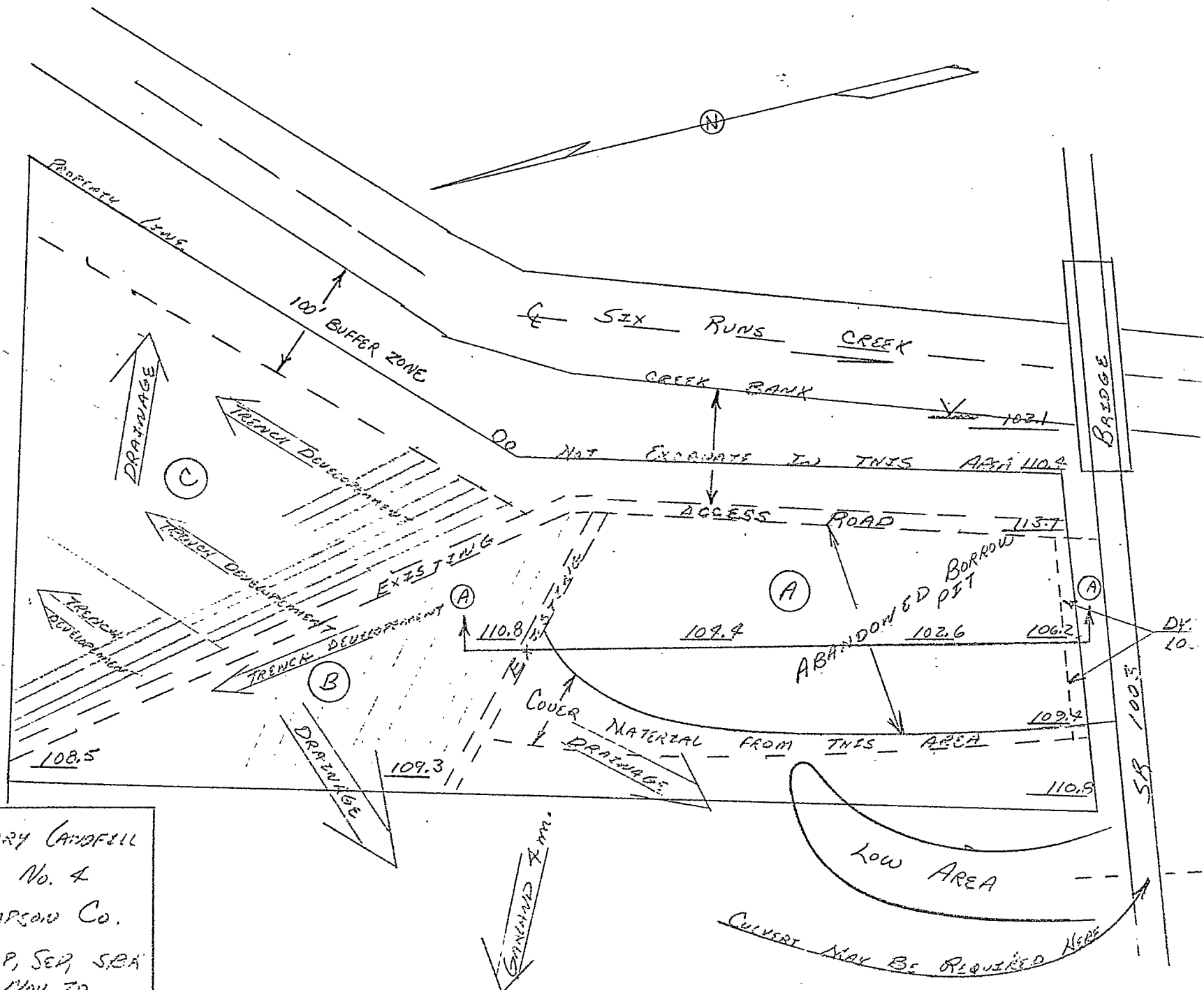
NOTE: ELEVATIONS, AS SHOWN, ARE RELATIVE



SECTION A-A

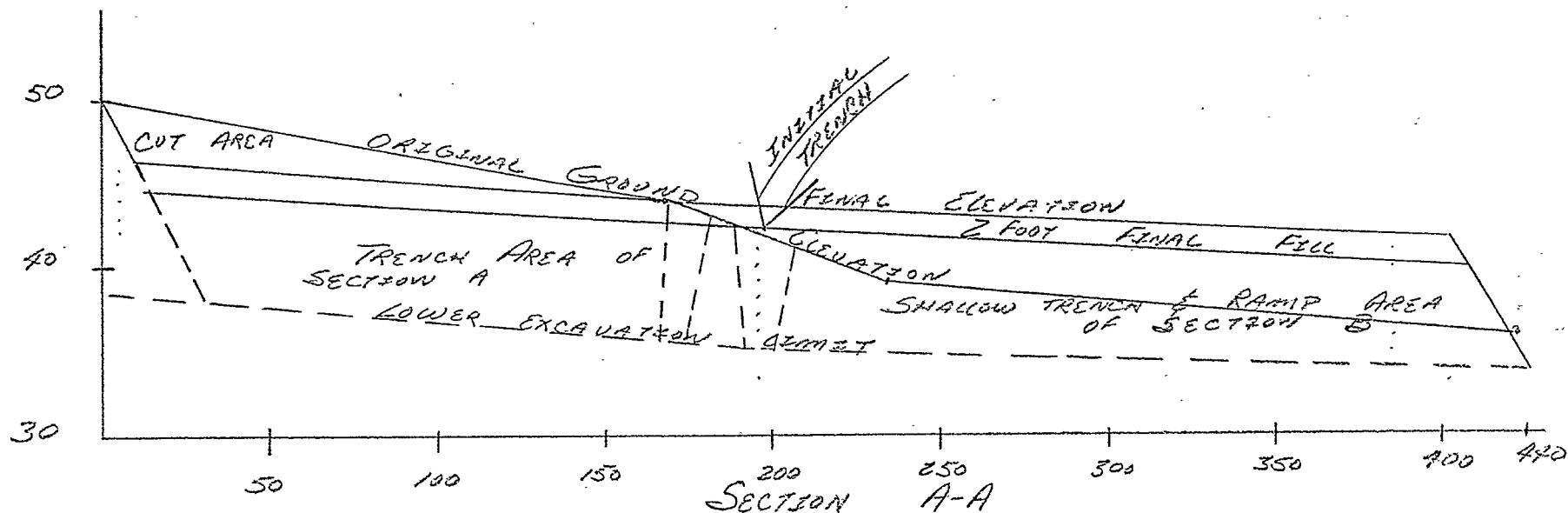
NOTE: ONLY RELATIVE ELEVATIONS ARE SHOWN

SITE No. 2
 SECTION
 SAMPSON C
 BY: JCP, SEP, SE
 DATE: 12 NOV 70
 SCALE: AS SHOWN
 2 OF 2



SANITARY LANDFILL
 SITE No. 4
 SAMPSON CO.
 BY: JCP, SED, SBA
 DATE: 12 NOV 70
 SCALE: 1" = 100'
 5.7 ACRES

NOTE: (1) PLOT PROVIDED FROM W. FLETCHER SURVEY
 OF 13 OCT 70.
 (2) ALL ELEVATIONS RELATIVE.



NOTE: ONLY RELATIVE ELEVATIONS ARE SHOWN

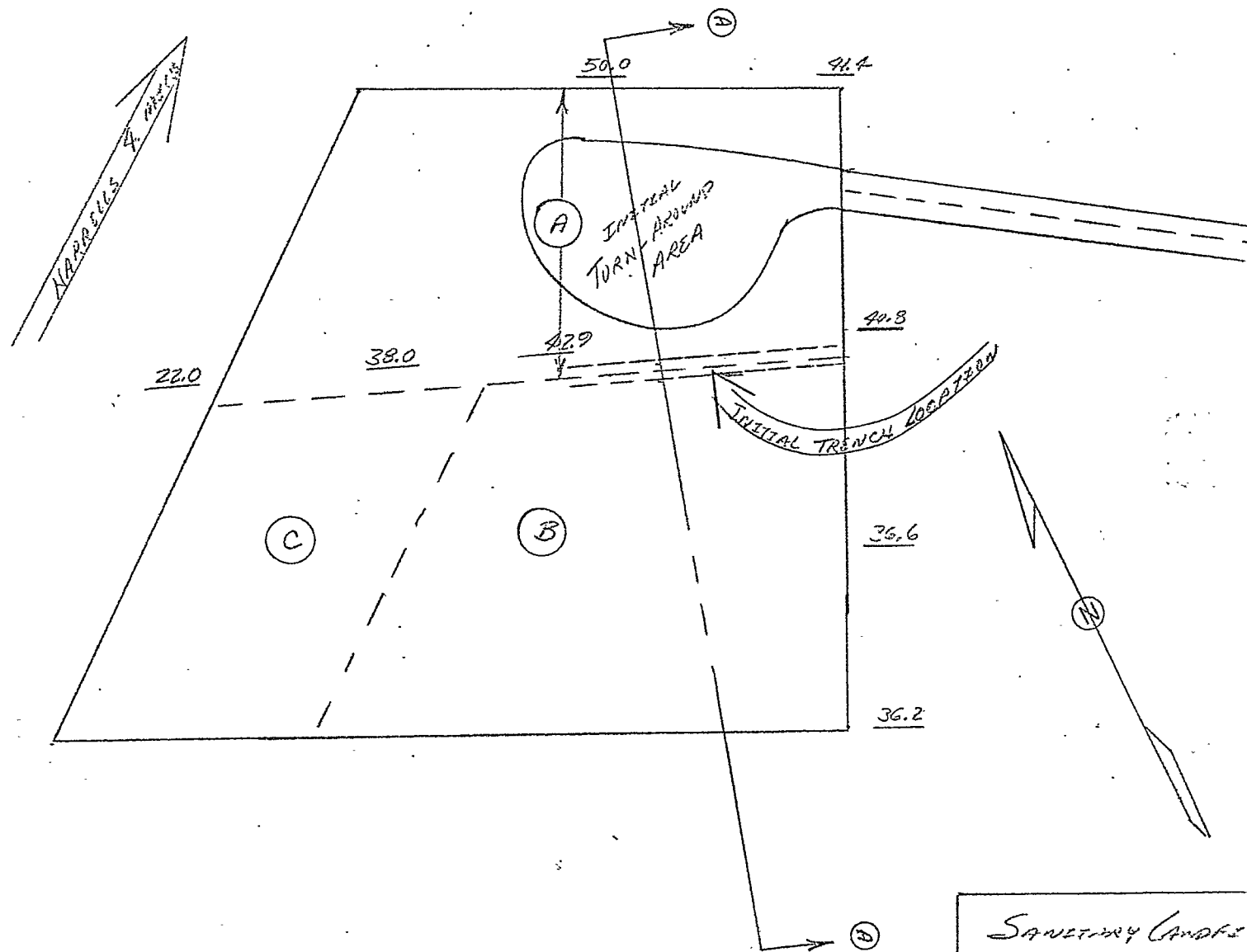
SITE No. 3
SECTION

BY: JCP, SEP, S.R.

DATE: 12 NOV 70

SCALE: AS SHOWN

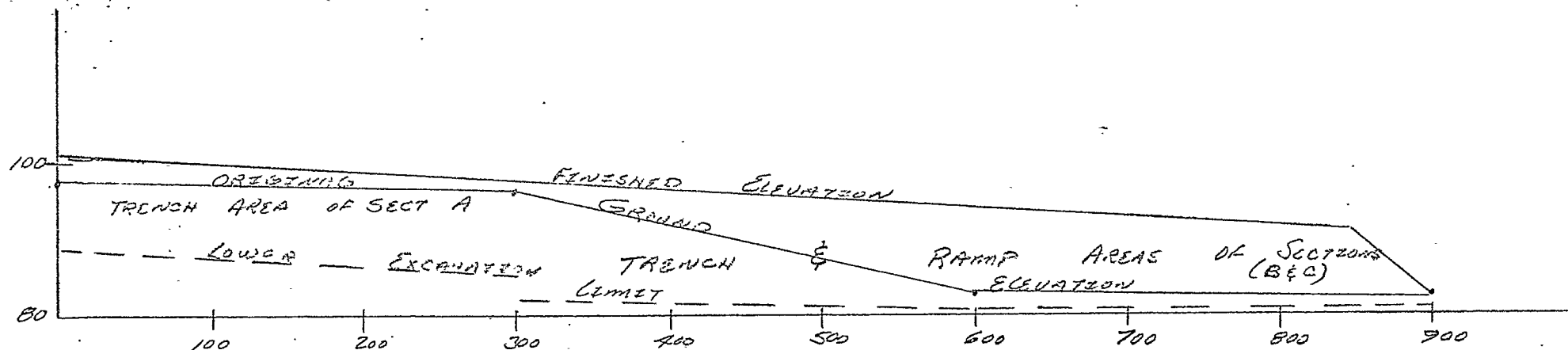
2 OF 2



NOTE: ELEVATIONS RELATIVE

3.70 ACRES

SANITARY LANDFILL
SITE No. 3
SIMPSON Co
BY: JCP, SEP, SE
DATE: 12 NOV 70
SCALE: 1" = 100'
1 OF 2



TYPICAL SECTION
(ELEVATIONS RELATIVE)

SITE No. 2
SECTION

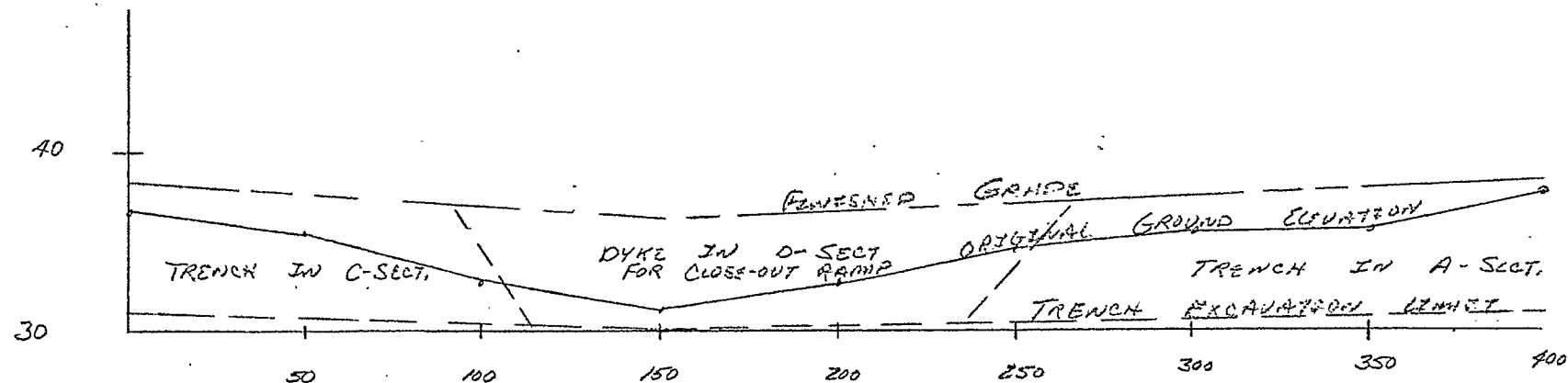
BY : JCP, SEP, SB

DATE : 12 NOV 70

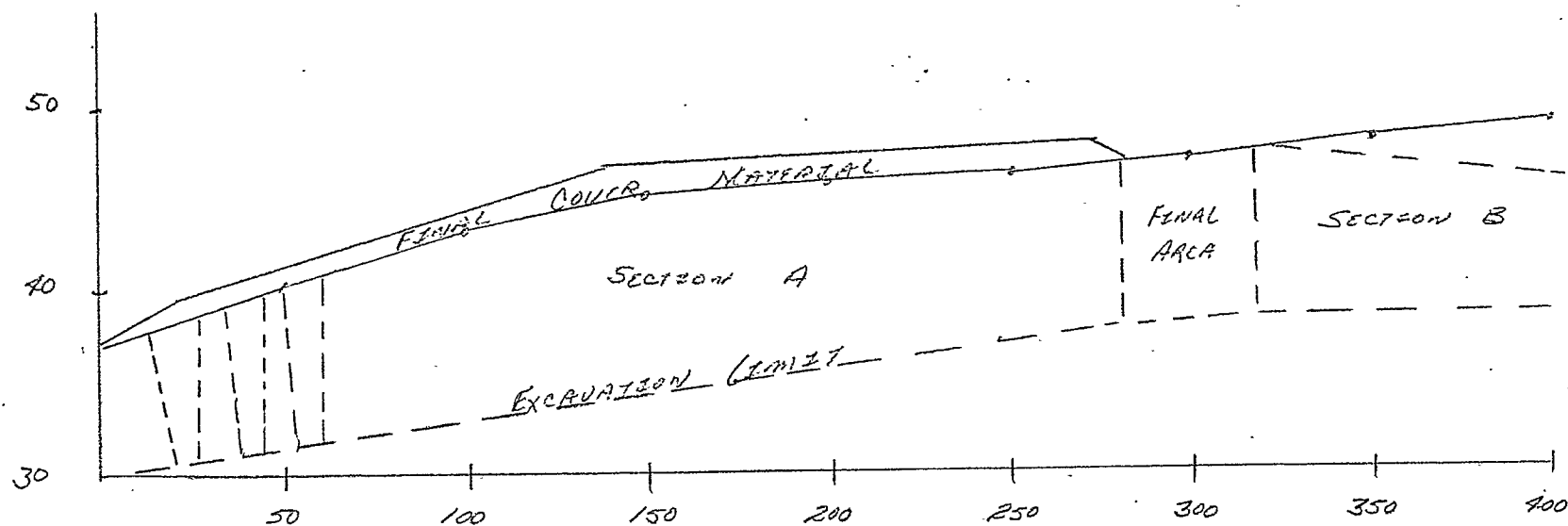
SCALE: AS SHOWN

NOTE: ELEVATIONS AS SHOWN TAKEN FROM DRAWINGS PREPARED
BY W.B. SHAW OF SAMPSON CO. HEALTH DEPT., CLEVELAND N.C.

2 OF 2



SECTION A-A.



SECTION B-B

NOTE: ELEVATIONS, AS SHOWN, ARE RELATIVE ONLY

SITE No. 1
SECTIONS

BY: JCP, SED, SBA

DATE: 12 NOV 1970

SOURCE: AS SHOWN

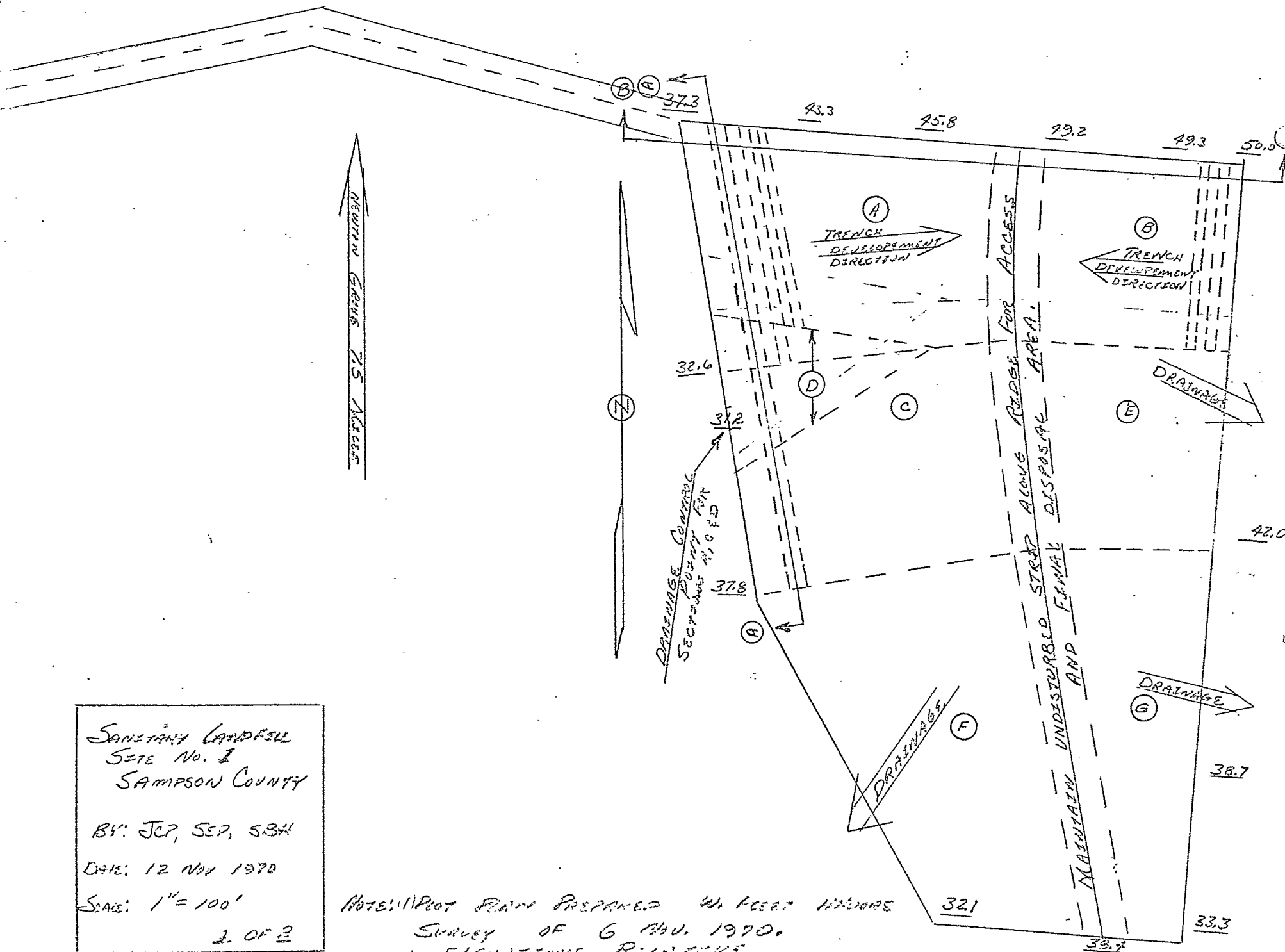
2 OF 2

SANITARY LANDFILL
 SITE NO. 1
 SAMPSON COUNTY

BY: JCP, SEP, SBH
 DATE: 12 NOV 1970
 SCALE: 1" = 100'

1 OF 2
 5.13 ACRES

NOTE: (1) PLOT PLANT PREPARED W/ FEET AND/OR
 SURVEY OF 6 NOV. 1970.
 (2) ELEVATIONS RELATIVE



NORTH CAROLINA
STATE BOARD OF HEALTH
RALEIGH

November 9, 1970

Mr. W. B. Shaw, R.S.
Sampson County Health Department
Cooper Drive
Clinton, North Carolina 28328

Dear Mr. Shaw:

Please find enclosed a copy of the report, recommendations, and attached drawings for the Sampson County Sanitary Landfill operation near Roseboro.

If this section can be of further assistance, do not hesitate to call.

Sincerely,



Jerry C. Perkins, Sanitary Engineer
Solid Waste & Vector Control Section
Sanitary Engineering Division

Enclosure

cc: ✓ Mr. Fred J. Wood

NORTH CAROLINA
STATE BOARD OF HEALTH
RALEIGH

November 9, 1970

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Sampson County Health Department
Cooper Drive
Clinton, North Carolina 28328

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Jerry C. Perkins, Sanitary Engineer
Solid Waste & Vector Control Section
Sanitary Engineering Division

Enclosure

cc: Mr. Fred J. Wood

STATE BOARD OF HEALTH
SANITARY ENGINEERING DIVISION
RALEIGH, NORTH CAROLINA

REPORT OF INVESTIGATION OR INSPECTION OF Sampson County Sanitary Landfill Site

Place visited Sanitary Landfill Site Near Roseboro Date October 29 19 70

Address Sampson County, North Carolina Time spent 1 day

By whom Jerry C. Perkins, Sanitary Engineer and Fred J. Wood, District Sanitarian

Persons contacted W. B. Shaw, R.S., Sampson County Health Department
(Owner, agent tenant, manager, other)

Reason for visit To provide a plan for the Sampson County Sanitary Landfill operation near Roseboro.

Copies to:

Mr. Fred J. Wood

Mr. W. B. Shaw

REPORT:

The tract investigated for a proposed sanitary landfill operation lies approximately 3.5 miles north of Roseboro, North Carolina, off State Road 1002. The tract, consisting of 9.8 acres, contains an abandoned borrow pit which is to be used for solid waste disposal. The general terrain of the area is rolling and the soil condition was observed to be a sandy clay with a gravel content. Sufficient earth material remains in the borrow pit bottom to provide adequate cover material for the disposal operations. The access road has been established but will require improvement as operations begin. Storm drainage running parallel to the access road was noted to cross the access road in at least one location. The overall area of the borrow pit lends itself to the area ramp method of disposal by sanitary landfill. Information available on the expected usage reveals that a rural population of 9,400 persons which includes the Towns of Roseboro, Salemburg, and Autryville will be using the site. The Towns of Roseboro and Salemburg will utilize their own collection vehicles in using this site. No private collectors are known to be working in this area of the county at the present time. No heavy volume of industrial waste is anticipated. Investigation of the surrounding area indicated that no water supplies are close enough to the site to cause any special restrictions on its use. Drainage from in and around the site drains to the Little Coharrie Stream Basin.

Recommendations:

1. Utilize the area ramp method of disposal using earth cover from the bottom of the borrow pit for the daily 6-inch cover material and for the final area cover of two feet.
2. Refuse disposed by a rural population of 9,400 would require the handling of 60-cubic yards of loosely compacted refuse or 15-cubic yards of compacted refuse daily and the handling of a minimum of 2.7-cubic yards of 6-inch earth cover material daily. A working face of 12-feet wide is required with adequate equipment for thorough compaction. Daily ramp advance is estimated to be 5.0 feet. The final 2-feet earth cover required for the completed ramp sections would be 5.0-cubic yards on a daily basis.

STATE BOARD OF HEALTH
SANITARY ENGINEERING DIVISION
RALEIGH, NORTH CAROLINA

REPORT OF INVESTIGATION OR INSPECTION OF Sampson County Sanitary Landfill Site

Place visited Sanitary Landfill Site Near Roseboro Date October 29 19 70

Address Sampson County, North Carolina Time spent 1/2 day

By whom Jerry C. Perkins, Sanitary Engineer and Fred J. Wood, District Sanitarian

Persons contacted W. B. Shaw, R.S., Sampson County Health Department
(Owner, agent tenant, manager, other)

Reason for visit To provide a plan for the Sampson County Sanitary Landfill operation near Roseboro.

Copies to:

Mr. Fred J. Wood

Mr. W. B. Shaw

REPORT:

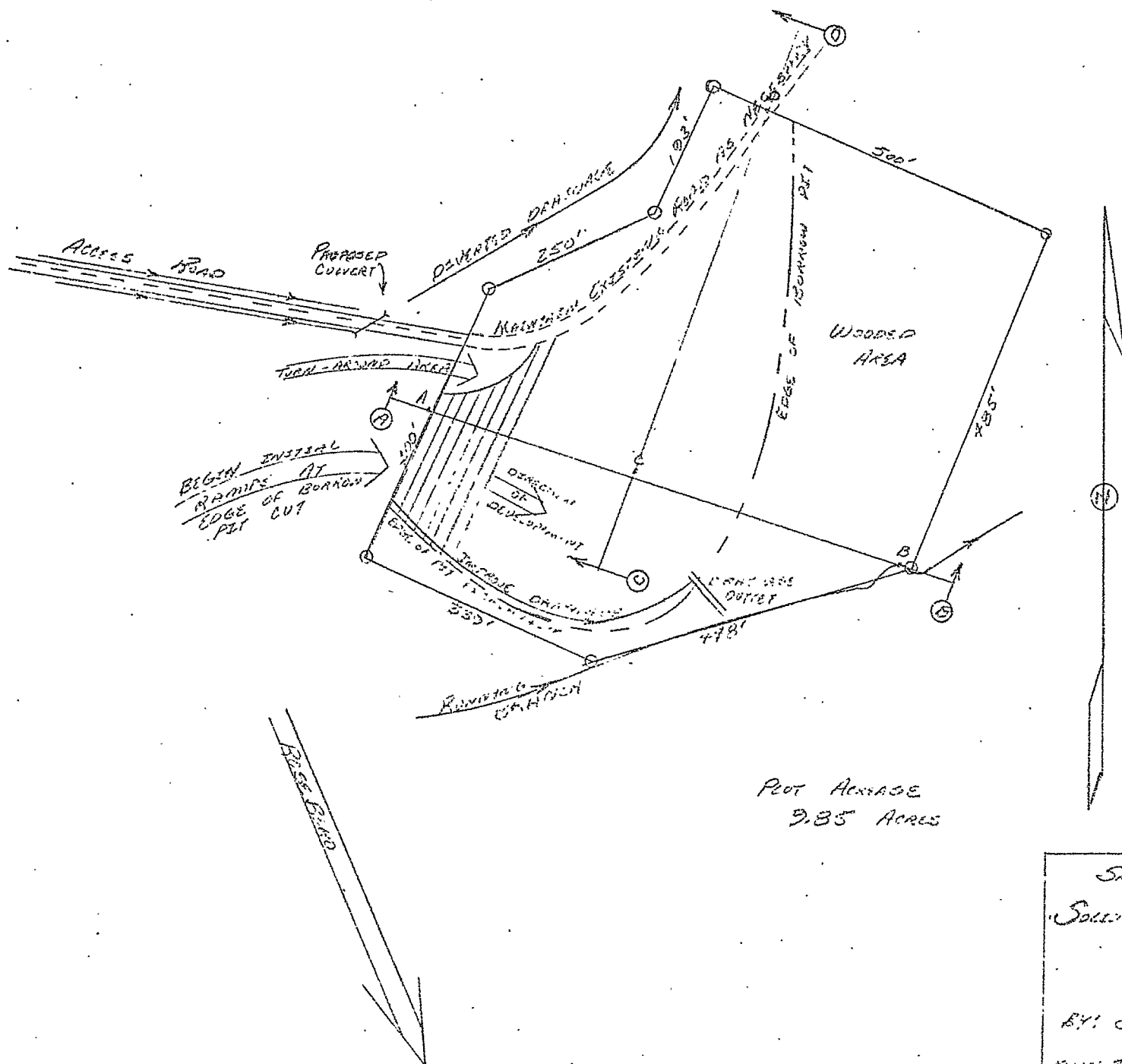
The tract investigated for a proposed sanitary landfill operation lies approximately 3.5 miles north of Roseboro, North Carolina, off State Road 1002. The tract, consisting of 9.8 acres, contains an abandoned borrow pit which is to be used for solid waste disposal. The general terrain of the area is rolling and the soil condition was observed to be a sandy clay with a gravel content. Sufficient earth material remains in the borrow pit bottom to provide adequate cover material for the disposal operations. The access road has been established but will require improvement as operations begin. Storm drainage running parallel to the access road was noted to cross the access road in at least one location. The overall area of the borrow pit lends itself to the area ramp method of disposal by sanitary landfill. Information available on the expected usage reveals that a rural population of 9,400 persons which includes the Towns of Roseboro, Salemburg, and Autryville will be using the site. The Towns of Roseboro and Salemburg will utilize their own collection vehicles in using this site. No private collectors are known to be working in this area of the county at the present time. No heavy volume of industrial waste is anticipated. Investigation of the surrounding area indicated that no water supplies are close enough to the site to cause any special restrictions on its use. Drainage from in and around the site drains to the Little Coharie Stream Basin.

Recommendations:

1. Utilize the area ramp method of disposal using earth cover from the bottom of the borrow pit for the daily 6-inch cover material and for the final area cover of two feet.
2. Refuse disposed by a rural population of 9,400 would require the handling of 60-cubic yards of loosely compacted refuse or 15-cubic yards of compacted refuse daily and the handling of a minimum of 2.7-cubic yards of 6-inch earth cover material daily. A working face of 12-feet wide is required with adequate equipment for thorough compaction. Daily ramp advance is estimated to be 5.0 feet. The final 2-feet earth cover required for the completed ramp sections would be 5.0-cubic yards on a daily basis.

3. Should industrial wastes become a problem in handling at the site, work out an agreement with the involved industrial firm to deliver industrial waste in a condition that will not impede the landfill operation nor cause hazardous working conditions for the landfill operators or their equipment.
4. Plan site development as indicated on the attached drawings taking necessary precautions to prevent blockage of surface runoff. Basics included in the attached plan are as follows:
 - a. Construct a turn around area near the entrance of the site utilizing discarded solid waste on the site and earth material for its base.
 - b. Begin initial ramps at the edge of the borrow pit cut on the western side of the tract.
 - c. Improve the existing drainage outlet as necessary on the eastern edge of the borrow pit.
 - d. Maintain the existing road bordering the borrow pit as necessary for crossing the property and as necessary to maintain compatibility with the site development.
 - e. Maintain elevations as shown on the attached cross sections so as to provide erosion control for the completed and developed site.
5. Improve the access road as necessary and install a culvert to divert storm drainage from the southern side of the access road to its northern side to divert drainage away from the working site.
6. Thoroughly compact all refuse before covering. Survey elevations indicate that two 6-foot lifts can be maintained over the western half of the site. The remaining portion can be developed as a single lift.
7. No burning is to be allowed.
8. Provide signs directing users to the sanitary landfill site and also provide directions for depositing solid waste at the site.
9. In accordance with the adopted solid waste disposal plan as proposed by the State Board of Health, the equipment to be used in the disposal operations for the county was to be based at this site. In selecting a storage/maintenance shed on this tract, choose an area which will be clear of the operational area and that does not interfere with the overall development pattern.

3. Should industrial wastes become a problem in handling at the site, work out an agreement with the involved industrial firm to deliver industrial waste in a condition that will not impede the landfill operation nor cause hazardous working conditions for the landfill operators or their equipment.
4. Plan site development as indicated on the attached drawings taking necessary precautions to prevent blockage of surface runoff. Basics included in the attached plan are as follows:
 - a. Construct a turn around area near the entrance of the site utilizing discarded solid waste on the site and earth material for its base.
 - b. Begin initial ramps at the edge of the borrow pit cut on the western side of the tract.
 - c. Improve the existing drainage outlet as necessary on the eastern edge of the borrow pit.
 - d. Maintain the existing road bordering the borrow pit as necessary for crossing the property and as necessary to maintain compatibility with the site development.
 - e. Maintain elevations as shown on the attached cross sections so as to provide erosion control for the completed and developed site.
5. Improve the access road as necessary and install a culvert to divert storm drainage from the southern side of the access road to its northern side to divert drainage away from the working site.
6. Thoroughly compact all refuse before covering. Survey elevations indicate that two 6-foot lifts can be maintained over the western half of the site. The remaining portion can be developed as a single lift.
7. No burning is to be allowed.
8. Provide signs directing users to the sanitary landfill site and also provide directions for depositing solid waste at the site.
9. In accordance with the adopted solid waste disposal plan as proposed by the State Board of Health, the equipment to be used in the disposal operations for the county was to be based at this site. In selecting a storage/maintenance shed on this tract, choose an area which will be clear of the operational area and that does not interfere with the overall development pattern.



PLOT AREA
9.85 ACRES

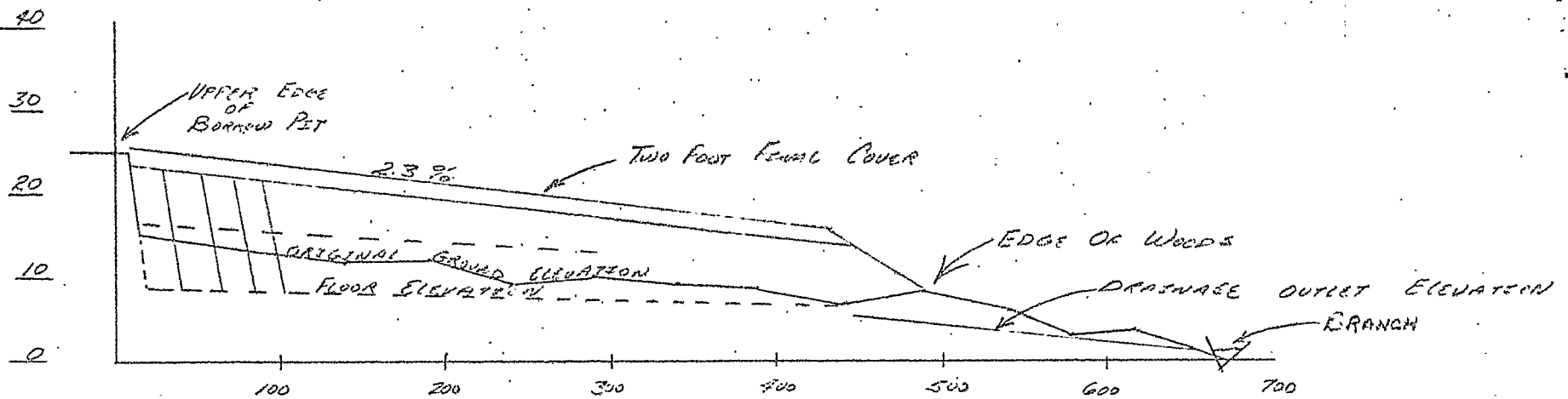
SAMPSON CO.
"SOLD WHITE DISPOSAL"
SHE

BY: C. J. 500 500

May 29 25 1970

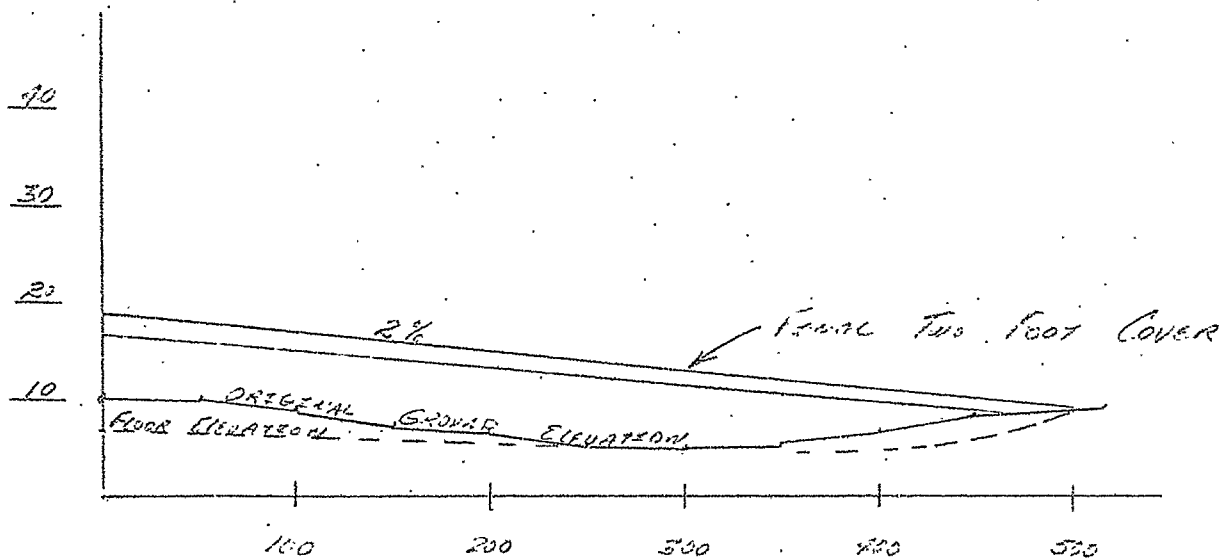
Sum: 1" = 200'

[illegible]



SECTION A-B

- NOTE (1) INITIAL BRANCH IN TWO (2) SIX FOOT CUTS.
 (2) MAINTAIN FLOOR ELEVATION TO THAT SURFACE
 DRAINAGE CAN BE IMPROVED AS NECESSARY.



SECTION C-D

SAMPSON CO
 CROSS-SECTIONS OF
 THE SOLID WASTE
 DETENTION SYSTEM
 NEAR MOORELAND
 BY: JCP SLD SK
 DATE: 25 OCT 70
 SCALE: 1" = 100'
 SHEET 1 OF 2

STATE BOARD OF HEALTH
SANITARY ENGINEERING DIVISION
RALEIGH, NORTH CAROLINA

REPORT OF INVESTIGATION OR INSPECTION OF Sampson County Sanitary Landfill Site

Place visited Sanitary Landfill Site Near Roseboro Date October 29 1970

Address Sampson County, North Carolina Time spent $\frac{1}{2}$ day

By whom Jerry C. Perkins, Sanitary Engineer and Fred J. Wood, District Sanitarian

Persons contacted W. B. Shaw, R.S., Sampson County Health Department
(Owner, agent, tenant, manager, other)

Reason for visit To provide a plan for the Sampson County Sanitary Landfill operation near Roseboro.

Copies to:

Mr. Fred J. Wood

Mr. W. B. Shaw

REPORT:

The tract investigated for a proposed sanitary landfill operation lies approximately 3.5 miles north of Roseboro, North Carolina, off State Road 1002. The tract, consisting of 9.8 acres, contains an abandoned borrow pit which is to be used for solid waste disposal. The general terrain of the area is rolling and the soil condition was observed to be a sandy clay with a gravel content. Sufficient earth material remains in the borrow pit bottom to provide adequate cover material for the disposal operations. The access road has been established but will require improvement as operations begin. Storm drainage running parallel to the access road was noted to cross the access road in at least one location. The overall area of the borrow pit lends itself to the area ramp method of disposal by sanitary landfill. Information available on the expected usage reveals that a rural population of 9,400 persons which includes the Towns of Roseboro, Salemburg, and Autryville will be using the site. The Towns of Roseboro and Salemburg will utilize their own collection vehicles in using this site. No private collectors are known to be working in this area of the county at the present time. No heavy volume of industrial waste is anticipated. Investigation of the surrounding area indicated that no water supplies are close enough to the site to cause any special restrictions on its use. Drainage from in and around the site drains to the Little Coharrie Stream Basin.

Recommendations:

1. Utilize the area ramp method of disposal using earth cover from the bottom of the borrow pit for the daily 6-inch cover material and for the final area cover of two feet.
2. Refuse disposed by a rural population of 9,400 would require the handling of 60-cubic yards of loosely compacted refuse or 15-cubic yards of compacted refuse daily and the handling of a minimum of 2.7-cubic yards of 6-inch earth cover material daily. A working face of 12-feet wide is required with adequate equipment for thorough compaction. Daily ramp advance is estimated to be 5.0 feet. The final 2-foot earth cover required for the completed ramp sections would be 5.0-cubic yards on a daily basis.

3. Should industrial wastes become a problem in handling at the site, work out an agreement with the involved industrial firm to deliver industrial waste in a condition that will not impede the landfill operation nor cause hazardous working conditions for the landfill operators or their equipment.
4. Plan site development as indicated on the attached drawings taking necessary precautions to prevent blockage of surface runoff. Basics included in the attached plan are as follows:
 - a. Construct a turn around area near the entrance of the site utilizing discarded solid waste on the site and earth material for its base.
 - b. Begin initial ramps at the edge of the borrow pit cut on the western side of the tract.
 - c. Improve the existing drainage outlet as necessary on the eastern edge of the borrow pit.
 - d. Maintain the existing road bordering the borrow pit as necessary for crossing the property and as necessary to maintain compatibility with the site development.
 - e. Maintain elevations as shown on the attached cross sections so as to provide erosion control for the completed and developed site.
5. Improve the access road as necessary and install a culvert to divert storm drainage from the southern side of the access road to its northern side to divert drainage away from the working site.
6. Thoroughly compact all refuse before covering. Survey elevations indicate that two 6-foot lifts can be maintained over the western half of the site. The remaining portion can be developed as a single lift.
7. No burning is to be allowed.
8. Provide signs directing users to the sanitary landfill site and also provide directions for depositing solid waste at the site.
9. In accordance with the adopted solid waste disposal plan as proposed by the State Board of Health, the equipment to be used in the disposal operations for the county was to be based at this site. In selecting a storage/maintenance shed on this tract, choose an area which will be clear of the operational area and that does not interfere with the overall development pattern.